

Manufacturers Record

Exponent of America



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Baltimore, Md.
DECEMBER 1, 1927

Instead of Pouring Hundreds of Millions Into Europe, American Bankers Should Concentrate Upon American Investments.

There would be far more safety for investments, far greater benefit to our own country, and far more wisdom displayed if the bankers of New York and other cities who are pouring millions of dollars of American money into Europe would turn these millions of dollars into safe and sound investments in the South.

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On the other hand, every dollar of American money invested by large banking interests in safe work in this country inures to the advantage of the banker, the investor and the borrower. Tens of millions of dollars could at the present time be placed in Florida alone to very great advantage to that State and to the investors, and millions almost without number in the South as a whole. Many Florida properties bought during the period of inflation can now be bought at entirely safe investment prices. Many first mortgages could be placed, or those already in existence be bought on a financial basis which would lift a load of financial burden from thousands of people and give good security to the investor.

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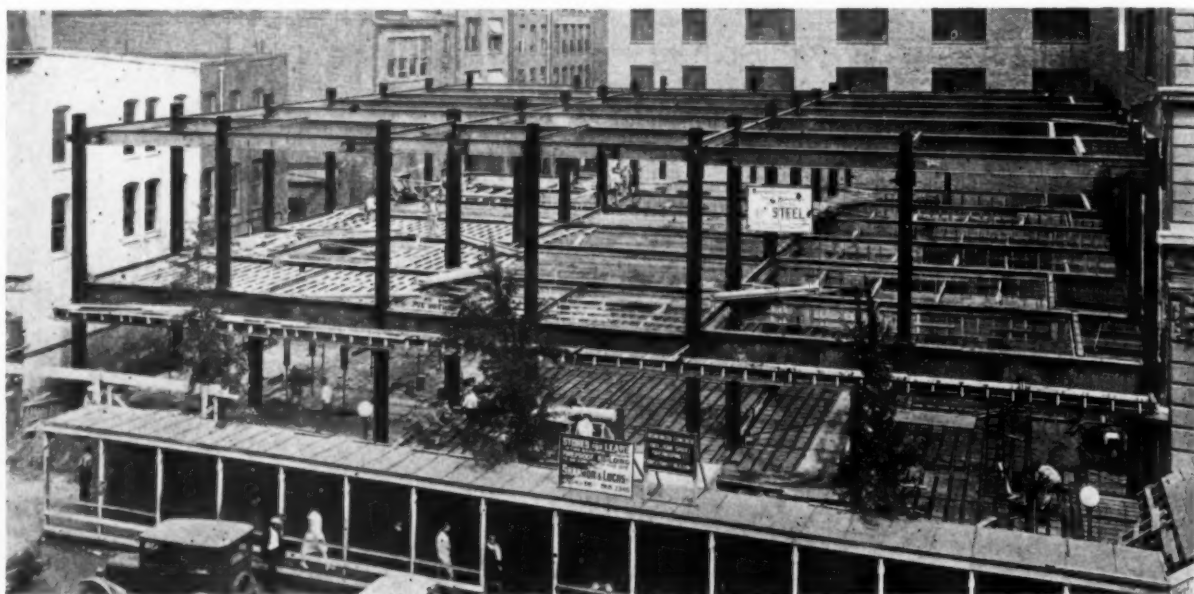


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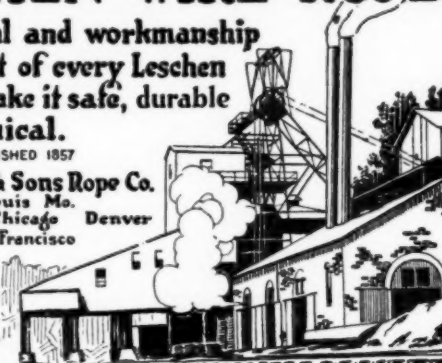
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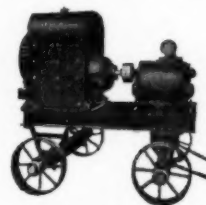
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Will the Gold Situation Bring About Lower Prices?

SOME of the leading economists of the world in studying the gold situation have indicated their belief that we are about to enter upon a long period of declining prices. It is a well known fact that throughout the world's history whenever great gold discoveries have been made, and the world's supply thereby increased, rising prices and abounding prosperity have followed, whereas low prices and business depression have come whenever the supply of gold was inadequate to meet the world's business requirements. Some important changes in the method of utilizing gold have been introduced but whether they will alter this age-long rise and fall of prices with the increased or decreased supply of gold remains to be seen.

Discussing this subject, Dr. Henry A. E. Chandler, economist of the National Bank of Commerce of New York, in the monthly publication issued by that bank refers to foreign criticisms of our gold policy and the decline of commodity prices and on this point says:

"The recent decline in commodity prices in many countries as well as in the United States has raised considerable question as to the possible trend in the future and as to its effect upon business and upon the international relations of the United States and other countries.

"Because of the unusual relation of gold to the trend of prices, and of the dominating position which the United States is believed to occupy in the world gold and price situation, this new decline in commodity prices has led to the concentration of inquiry upon American monetary policy. The result has been a series of criticisms which have carried with them implications of a far-reaching nature.

"The future trend of the price level constitutes one of our most uncertain problems. Whether or not, as some believe, the world is to face a shortage of gold and the trend of prices is to be steadily downward until they perhaps approach the pre-war level, certainly most authorities would agree that if prices are not to trend downward, present supplies of gold must be utilized with much greater efficiency than before the war.

"If it is true, as has been inferred, that the effect of the present so-called 'demonetizing' policy of the United States is to reduce the efficiency of the world's gold reserves, and that the effect of our economic policy is to induce further gold imports, then it will be difficult indeed to disprove that a further decline in world commodity prices with all its 'disastrous' effect upon world business—to quote Professor Cassel—will be attributable to the United States.

"Irrespective of the relation of the problem to future business, the situation is of great importance to us. The weight of the external debts of European countries, and to a degree that of their internal debts, depends upon the value of gold or the general price level. A substantial

change in the price level that would decrease the burden of these debts would, to say the least, aggravate some already difficult problems and impede the recovery of Europe.

"In view of these facts we cannot afford to be considered a wilful party to the decline in the world price level. Either our monetary policy has been a factor in the recent decline or it has not. If it has, we should find some means of altering it. If it has not, then the misconception which in that event must be obscuring the thoughts of many should be cleared away."

Dr. Bertil Ohlin, professor at the University of Copenhagen, in a recent statement in a Swedish paper, and republished by the Swedish-American Trade Journal, discussing the future of the world price level, said:

"If we are to consider what prospects exist for the future stability of the world price level and the value of gold, we must first examine how far the monetary system, as it appears today after the return to the gold standard, differs from the special kind of gold standard which prevailed before the war.

"Perhaps the most striking change is that in most countries gold coin has disappeared from circulation. It is estimated that about £500,000,000 were in circulation before the war, whereas now four-fifths of that amount have been withdrawn and lie in the vaults of the central banks. The corresponding strengthening of the gold reserves has made it possible to maintain practically the same regulations for covering the note issues as before the war, in spite of the world price level now being about 50 per cent higher than it was then, with the result that there is a proportionately increased need for means of payment.

"This change, however, once effected, produces no essential alteration in the character of the gold standard. A rise of the gold value, i. e., a fall of the general price level, results in a reduction in the banks' gold-cover requirements for a diminished quantity of notes. This causes a reduction in the demand for the newly produced gold, which tends to lower its value or at any rate to counteract a further rise.

"So long as the banks adhere to their pre-war practice in regard to the note cover, and the general public's habits of payment do not undergo any violent change, the monetary demand for gold will have the same elasticity and stabilized character as it had formerly.

"On the whole it may be said that no very important change has taken place in either respect. It would appear, however, as if the belief that large gold stocks are advantageous, had grown during the past decade, and as if for that reason a reduction in the stock of notes in many cases is not accompanied by a diminution of the gold reserves.

In fact, the rise in the percentage of cover which takes place in its stead, is regarded as a sign of strength.

"If it should become widespread, such a practice at length necessarily would beget very serious consequences. The tendency of the gold demand to fall off would disappear. A considerable rise in the value of gold and a serious drop in the world price level then would be far more likely than it has been.

"We see, then, that the semi-automatic regulation of the monetary value which prevailed before the war, is in danger of undergoing a decided change for the worse if the former note-cover practice should be altered.

"Of far greater importance to the monetary system than the change that may already have taken place in this respect, however, is, the re-distribution of the world's gold stocks. The United States has become the possessor of a quantity of gold which, in fact, is considerably more than half of the gold stocks in the world and by no means proportionate to what is required to cover its circulating medium. Simultaneously with this accumulation of gold a significant reform has taken place in the United States monetary policy. In order to prevent this vast influx of gold from causing a corresponding expansion of credit, which necessarily would involve a violent inflation, the Federal Reserve Board has been compelled to disregard entirely the size of the gold reserves in determining the question of credit.

"The influx and efflux of gold into and from the United States thus has lost all influence upon the monetary purchasing power and upon the price level in that country. The question of granting credit is determined instead by what the Federal Reserve Board considers suitable from an economic point of view.

"This implies nothing less than a revolution in the monetary system, not only of the United States but of all countries with a gold standard. The control of the development of the world price level has passed entirely into the hands of the Federal Reserve Board and its governors.

"Should that Board deem it advisable to pursue a liberal credit policy, resulting in the raising of the American price level, the consequence would be that a portion of the superfluous gold would flow to other countries. There it would cause an expansion of credit and gradually a raising of the price level all along the line.

"If, on the other hand, it should be considered in the United States that a reduction in prices would be advisable, then other countries would be compelled to follow suit. Otherwise their price level would eventually be found too high, their balance of payment would become 'adverse,' and their gold would begin to flow into the vaults of the Federal Reserve banks. In view of their note cover the European central banks could not permit this but would be forced to carry out a restrictive credit policy that would reduce the price level rapidly also in Europe.

"Other countries thus are compelled to let their price level vary on about the same lines as the American. If the Federal Reserve Board resolves upon raising the value of gold, i. e., upon deflation, then its reserves will increase, while, vice versa, a lowering of the gold value in the United States can be forced upon the whole world in connection with a reduction in the excessive gold reserves of the Federal Reserve system.

"The Federal Reserve system has effected a valorization of gold, comparable with the Brazilian coffee valorization. By releasing a portion of the surplus reserves it causes a drop in the gold value throughout the world, i. e., a rise in the world price level. By increasing the reserves it brings about an increase in the scarcity of gold and a fall in the world price level.

"It should be observed, however, that the primary change

always is a variation in the American price level. The resultant increase or reduction in gold stocks is something secondary, something that is permitted to take place in order that the national monetary policy may not be disturbed by the movements of gold which under present circumstances are of no very great concern to the United States.

"We find a recent example of this in the last two years' fall in prices, both in the United States and in Europe. During this period, the United States, after some exportation of gold in 1925, has been importing gold in quite considerable quantities. No greater mistake could be made than to regard general deflation of prices as a result of a reawakened desire for gold on the part of the United States. What possible reason would the Federal Reserve Board have for wishing to increase its already inconveniently large gold stocks? The real reason for the increase is that the price level in the United States has been dropping, partly, no doubt, owing to an insufficiently liberal credit policy, and partly owing to heavy crops and increased industrial productivity, and that other countries have reluctantly followed suit in this fall in prices, their central banks having been forced by the threatening efflux of gold to adopt a restrictive credit policy.

"The pre-war gold standard was in reality an example of managed currency, in which the control acquired a semi-automatic character, because the central banks were all actuated by practically similar traditional principles of credit policy, gold cover, etc., and because the public habits of payment underwent no violent changes. The post-war gold standard is an entirely different kind of managed currency, in which the control is exercised by the Federal Reserve Board and the boards of the leading Federal Reserve Banks on the basis of considerations which have nothing to do with either gold cover or gold movement, but which are dictated chiefly by the possibilities of keeping production going at full pressure.

"We can hardly avoid an additional conclusion: that no inquiries into the probable extent of the gold production and demand will be of much value in determining the course of prices during the next 10 years. Variations in these factors are not likely to induce the Federal Reserve Board to abandon its present policy, but will lead either to an increase or to a reduction in the quantity of gold stagnating in the vaults. As regards the course of prices later on, it is possible that the Federal Reserve System's reserves will not prove sufficient to cope with the forces emanating from fluctuations in the gold production and demand. To estimate at present the strength of these forces 10 years or so hence is possible only by allowing such wide margins of uncertainty that the conclusions as yet hardly can evoke much interest.

"The development of the world price level during the next decade is a question of American monetary policy. The decision regarding its stabilization lies in the hands of the leaders of that policy. It is a tremendous responsibility. A real deflation would render Europe's economic recovery, if anything, still more difficult. It may well be asked whether the Federal Reserve Board is not partly responsible for the tardy improvement of the past few years. This question to what extent the fall in prices during 1926 and 1927 can be regarded as a deflation likely to result in an economic depression, however, must be made the subject of a separate analysis."

HOW THE SCHOOLS ARE INJURING THEMSELVES.

A LEADING manufacturer, doing world-wide business, writing to the MANUFACTURERS RECORD in regard to some recent revelations as to what is going on in some of the educational institutions in this country, said:

"I am at a loss to understand how our good people can sit still and allow these parlor Bolsheviks in our universities to wield as much power as they are doing today. For my part I am through. The——University and similar institutions of learning will not get another penny of mine until they get back to the fundamentals of true Americanism."

SIR GEORGE PAISH AGAIN GIVES UNWISE ADVICE TO AMERICA.

WITHOUT single mention of the word "Tariff" in his utterance, Sir George Paish, British economist and authority on world finance, strongly suggests at least readjustment of the American protective tariff, in an article, "Will the Prosperity of America Be Maintained?" in the *Tariff Review*, published by the American Tariff League. And this indirect reference to American tariff readjustment becomes the more strong when taken in connection with Sir George's remarks on the subject during a recent visit to the United States.

First citing the change of the United States, since the war, from a debtor to a creditor nation, and estimating that even the foreign interests alone on American loans abroad runs to \$1,000,000,000 a year, Sir George also recalls the increased elasticity given to credit through operations of the Federal Reserve system. He then continues:

"If the United States does not buy abroad in sufficient volume to permit foreign countries to purchase her produce in return, she cannot sell that produce and her income is reduced. Under existing circumstances, this would be suicidal. America's exporting industries are heavily in debt and if they could not sell their products in sufficient quantity at adequate prices they would be unable to meet their obligations to bankers and others. Thus, a situation would arise that would probably lead to a serious breakdown of credit in the United States. Already, the farming industry in America is finding great difficulty in meeting its obligations. Certainly, any further contraction in the demand for food-stuffs, accompanied by still lower prices for agricultural products, would have disastrous consequences.

"On the other hand, if America were to purchase more freely from foreign countries, then those countries could continue to purchase freely from her, and at the same time better meet their obligations to the United States. In this way, the solvency of the American producers would be preserved, together with that of their customers, and a great world credit crisis would be averted."

With all due respect to Sir George Paish, many persons will read into this not only an insidious appeal for reduction in the American protective tariff, but also a clever appeal to American farmers in their groping for some practical method to obtain relief from any unprosperous agricultural conditions. Also, he parries any inquisitiveness over Europe's apparent worry on America's economic future by stressing that such American purchases from abroad would be of selfish advantage to America by assuring amortization of United States loans to foreign nations.

United States investors in foreign securities and in foreign enterprises competitive with American industries are legally and morally entitled to payment of interest on such loans and to repayment of the principal. But, they are not justified in asking their own American compatriots to make such payments possible by any sacrifice of American industry and prosperity—American stability. To throw the United States wide open to foreign goods produced by near-pauper foreign labor would mean the closing of American industries, the formation of bread lines, the reduction of the American laboring man and woman from a position of American comfort and happiness to the level of the underpaid and unhappy-living foreign laboring man and woman.

Further, while the surrender of the American protective tariff might assure payment of foreign interest and loans to some Americans, it would coincidentally stop the interest and amortization payments of American industries to a tremendously larger number of American investors—American investors who have put their money into American enterprises, rather than into foreign enterprises competitive with American industries.

In every instance in which the United States has aban-

doned its protective tariff, unemployment, poverty and national poverty have followed, except when the world war developed just in time to check this disaster then under way under the Underwood Tariff law. As a preventive of such disaster, President Wilson said that American industrialists must "match wits" with foreign producers; but, when the basis of cheap foreign production is near-pauper labor, this becomes an impossibility in the United States.

Far better would it be for Sir George and other foreign economists to recognize and accept the real, actual fact: The prosperity of the world at large rests largely on American prosperity, and the prosperity of foreign nations can be promoted better through American prosperity than through an American poverty of capital and of labor on a par with their own. Already foreign nations are underselling, in the United States, American producers in many lines and the effects are being felt in American industry. Instead of stimulating this foreign competition in the United States, America should take immediate steps to curtail it.

FLORIDA CITRUS FRUIT TO BE EXPORTED IN REFRIGERATED SHIPS.

ARRANGEMENTS have been made for the establishment of direct refrigerated steamship service from Jacksonville to the United Kingdom. Through the efforts of the Strachan Shipping Company, Armour & Co.'s cold storage division at Jacksonville, and others, and Parsons & Co. of London, monthly schedules have been arranged for steamers which will carry from \$40,000 to \$50,000 worth of oranges and grapefruit on each trip. Beginning with December and continuing through April it is proposed to have monthly sailings of steamships of the Leyland Line, the first steamer being the *Daytonian*.

The fruit, it is said, will be pre-cooled shortly before the date of shipment and then sent direct to London. The Times Union of Jacksonville in giving some details of this movement states that Parsons & Co. are the largest importers of fancy fruit in the United Kingdom, with branches throughout Great Britain as well as on the continent. They have for years handled apples from the United States and of recent years have been importing American cranberries heavily. Referring to figures quoted by the Times Union—157,580 boxes of grapefruit were shipped from the United States to the United Kingdom in 1926, although these shipments have largely consisted of fruits not especially packed for exporting, but for domestic trade. It is claimed that strict regulations will be enforced for shipment of the fruit which is to go forward from Jacksonville, and that is a very essential point, for there is shipped to domestic markets a great deal of Florida fruit which should never be allowed to go out of the State. This year's crop is reported to be considerably short of last year's yield but on the average of much better quality. A good deal of small fruit and some inferior fruit is being sold not only in local Florida markets, but outside the State, to the discredit of the citrus industry.

The MANUFACTURERS RECORD has for years advocated the shipment of Florida fruit both coastwise and foreign in refrigerated ships. This industry is too large to depend entirely upon the railroads, and with the rapid growth of the vegetable business the citrus fruit industry should be worked in connection with refrigerated ships exactly as California is doing with much of its produce. With its wonderful seacoast and its many good harbors Florida is in a peculiar position to secure the benefit of water transportation rates on its products whenever its people bring about the adequate development of refrigerated shipping for the foreign trade and the home trade alike.

SOME NEW ENGLAND VIEWS.

IN the hundreds of letters from leading business men throughout New England, showing their appreciation of the letter this paper sent to its readers and to a few other people in New England expressing the sympathy of the South for the flood disaster which had resulted in the loss of many lives and much property, there was unstinted praise and expression of appreciation of the closeness of the relation which should exist between the South and New England.

Only one discordant note was heard. That was in a letter from Henry D. Sharpe, of Brown & Sharpe Manufacturing Company of Providence, and published last week with other letters on the subject. In the course of this letter Mr. Sharpe said:

"Your letter has evidently a political purpose. My own personal feeling is that the good sense of New England people will teach them the importance of attending to their own business of flood relief, and prescribe for the troubles of the Mississippi Valley as the question may have merit."

That Mr. Sharpe could for a moment think the MANUFACTURERS RECORD was using an occasion of distress and suffering in New England as an opportunity of sending out a letter of sympathy having a political purpose in mind is incomprehensible. It is gratifying to know that not a single one of the other hundreds of letters that came from New England people took such a position. There was no thought of politics in that letter, no desire whatever to use New England's disaster for political purposes or for enlisting the co-operation of New England in the protection of the Mississippi Valley section. Mr. Sharpe, we are afraid, wrote his letter without due thought. When the MANUFACTURERS RECORD descends to that point where it could use a letter of sympathy to an individual or a section for political purposes, the spirit which has controlled it for many years will have passed out of existence.

One interesting phase of Mr. Sharpe's letter is: "My impression is that the various New England States will wish to administer their own supervision in the matter of prevention of disasters of this kind in the future. It is very evident that New England needs a more careful supervision of its dams and water storage, but we in this section are able to maintain such supervision better than could be done by any Federal power."

A somewhat similar thought comes from E. O. Goss, president of the Scovill Manufacturing Company of Waterbury, who, likewise, expresses his opposition to any intervention by the Federal Government in the matter of flood control in New England. Freely admitting the propriety of the Federal Government's operations in the Mississippi Valley, Mr. Goss expresses his opposition "to any further encroachment of the Federal bureau in the province of the rights and duties of our several States."

These two letters evidently indicate a very pronounced opposition to the centralization of bureaucratic control in Washington of things which should be left to individual States. With that in view in general the MANUFACTURERS RECORD is in hearty sympathy. We have long vigorously opposed centralization of bureaucratic power in Washington as a menace to the future of this country, but there are some things which can only be done by the Federal Government. As the Federal Government controls all the navigable streams of the country, and no bridge or dam can be built across a navigable stream without permission of the Government, individual States are, therefore, deprived of the opportunity of doing what otherwise they might be able to do in the matter of river control.

H. C. Daggett of the S. Morgan Smith Company of Boston, in a letter published elsewhere in this issue, shows that the reports of storm damage in New England have not by any means told the whole story. Many people in Vermont have

been completely ruined, but they are bearing their losses cheerfully, as all Americans do, and are hustling to get their property cleaned up so they may still "carry on." One interesting suggestion made by Mr. Daggett is that the Federal Government should annually put aside a sum of money as an emergency fund or insurance to cover all losses from floods, earthquakes and cyclones, and thus protect the people of the country at large from any loss by reason of these disasters.

He states that the flood conditions in Vermont were not due to the breaking of dams or the bursting of reservoirs, but to a great cloudburst from which the discharge was so great that the river bed could not carry the amount of water that fell.

\$800,000,000 TO BE SPENT BY FORD IN 1928.

IN line with other expressions of reasonable optimism for business in the United States in the coming year, Henry Ford voices the view that the national outlook for 1928 "is simply a matter of production," and opines that "all production in this country is either holding its own or is increasing." As Mr. Ford explained his outlook:

"It is based on ample evidence of continued and increasing material prosperity. National wealth is increasing. Individuals have more money. Taxes are on the decrease and governmental economy has made for better business on all lines.

"People buy when they have money. They become cautious in their expenditures only when money becomes scarce. Money is not scarce today, nor will it become so next year, in my opinion. Therefore, we shall have what we visualize as prosperity.

"The outlook for 1928 is simply a matter of production. Production means the consumption of materials and labor. All production in this country is either holding its own or increasing, and I believe that it will continue to increase during next year. That will mean greater distribution of money and greater purchasing power."

And contributory, proportionately, to the prosperity which Mr. Ford predicts, will be the productivity resumed, both directly and indirectly, through the reopening of the Ford auto plants. Mr. Ford announces that his concern will spend \$800,000,000 in the next twelve months in materials, labor and other features of his automobile business.

All of which will go far toward promoting the national prosperity which Mr. Ford and many others see hovering just above the horizon.

SENATOR NORRIS SEES LIGHT ON MUSCLE SHOALS.

A LETTER written by Senator Norris of Nebraska to a Mr. Roulhac, and made public November 23, shows that light is slowly but surely filtering into the murk that has so long surrounded Muscle Shoals. Senator Norris said in part:

"I cannot close my eyes to the fact that practically all (as far as I know all) of the unselfish and disinterested chemists and scientists declare that the cyanamid process is out of date and that we cannot use that process to make fertilizer and expect to compete with the present price of fertilizer on the market. This means that nitrate plant Number Two, as far as fertilizer is concerned, is completely out of the question. It is like asking the farmer to harvest his wheat with a cradle and not to use the selfbinder.

"Nitrate plant Number Two can make explosives and, until we have built other plants of a more modern kind, we ought to keep it as an emergency, war-time proposition. Beyond that, it has no use whatever. Since nitrate plant Number

Two was built, modern invention has decreased the cost of the extraction of nitrogen from the air about one-half."

The American Farm Bureau Federation is still trying to keep the farmers chasing the mirage of cheap fertilizers, though how well it is succeeding, and how much longer it will have the gall to persist in the effort, remains to be seen.

Secretary of Agriculture Jardine has proposed the most sensible solution of the Muscle Shoals problem yet put forth. He suggests that we lease the power plant at Wilson Dam to a private company, and devote the revenue therefrom to research into the manufacture of concentrated fertilizers and their use, and into demonstration stations for teaching the farmers how to use them. Such an arrangement would:

1. Keep the Government out of the business of generating and selling power.
2. Go further to provide cheap fertilizers than their actual manufacture at Muscle Shoals and do it without putting the Government into business, but through the exercise of the scientific and educational functions of the government already well established and nowhere challenged.
3. Comply with the letter and the spirit of the National Defense Act, both in the above, and in keeping the nitrate plants at Muscle Shoals in readiness for the emergency manufacture of explosives.

No other proposal has been made that is so thoroughly sound, reasonable and workable.

TULSA'S \$3,000,000 UNION STATION IN CONTRAST WITH BALTIMORE'S DEPOT.

THROUGH the co-operation of the city of Tulsa, Okla., in contributing \$1,000,000 toward a \$3,000,000 depot, the other \$2,000,000 to be furnished by the railroads, that city is to have a modern, up-to-date Union Station. The Observer of Charlotte, N. C., is using this as an illustration of why the Southern Railroad should comply with the earnest request of that city, one of the most prosperous in the South, to build a depot worthy of the situation.

But why should Charlotte be disturbed over the situation when the city of Baltimore, with a population of over 800,000, has station facilities so unworthy of the city that in contrast with what Tulsa will have they are a real joke. And yet when the secretary to the Mayor of Baltimore, a few weeks ago, speaking before a luncheon club, urged the importance of a union station in keeping with the size and travel of the city, some of the representatives of the Pennsylvania and the Baltimore and Ohio took the ground that if anybody in Baltimore was expecting the building of new stations within the next 50 years they would be badly disappointed. We presume, however, that these statements made by railroad representatives were not official.

A CALIFORNIA VIEW.

H. B. WORDEN, vice-president of the Redwood Manufacturers Company of San Francisco, in acknowledging receipt of a copy of the Blue Book of Southern Progress, says:

"The writer has not yet gone over the entire book, but has gone over a considerable portion of it and found it to be extremely interesting. Different statistics appeal to different readers. The writer chances to be of pre-Revolutionary lineage; therefore, the subject matter on pages 96, 97, 98 and 99 was intensely interesting to him.

"The figures given on the percentages of negroes in the South, and in the United States, were also not only surprising, but interesting.

"The writer has in the course of business in the last 25 years spent a great deal of time in the South, and is perhaps better equipped by experience to appreciate your work than the average business man of the Pacific Coast."

This is simply another illustration of the nation-wide influence of the Blue Book of Southern Progress in drawing the attention of business men everywhere to the South.

FLOOD CONTROL ESSENTIAL TO NATIONAL DEFENSE.

RECENT news dispatches have indicated a strong opposition in certain quarters to a comprehensive scheme of control of Mississippi floods. There are many angles to the question. Let us consider it for a moment merely from the point of view of national defense.

By spending half a billion dollars annually for our Army and our Navy we acknowledge the possibility that some day we may be locked in a deadly struggle with the combined armies and navies of a powerful foreign coalition; suppose that time to have arrived. We know from the past war that all our productive resources would be taxed to the utmost. The effort which our transportation system had to make in the last war, when we merely threw our fresh vigor into a struggle between two already exhausted foes, is only a mild indication of the terrific burden that would be put upon our railways, our highways, and our partially developed inland waterways in the effort to move men and materials. In such a situation comes the spring of the year, and with it, floods gathering in the far tributaries of the Mississippi's thousand streams. From the melting snows of Colorado's lofty mountains and the spring rains of Kansas pour torrents which, recruited by rains in Oklahoma, repeat in that State the havoc they have wrought there in past years, sweeping away—as they have done before—all highway and railroad bridges, cattle, barns, homes and towns, and isolating the Army posts; continuing their devastating course across 300 miles of the fertile State of Arkansas and finally adding their load to the burden of the Mississippi's straining levees and rushing spillways.

From the winter's accumulation of snow in the mountains of Wyoming, Montana, North and South Dakota and torrential spring rains in much of the river's basin comes another flood, paralyzing the transportation facilities, destroying property and producing capacity and withdrawing from war work thousands of workers; while down the mighty Ohio, crippling the great industrial area from Pittsburgh to Cairo, rolls the greatest flood of them all to join these others in gorging the channel of the Mississippi and paralyzing the vitals of the nation.

Seen in this light, does the expense necessary to add the protection of reservoirs to that of levees and spillways seem extravagant? Does it seem sensible to depend upon the Army engineers, who for 50 years clung tenaciously, in the face of fierce opposition, to what even they now acknowledge to have been a colossal blunder? When they assure us that now they can protect us from floods by adding spillways to levees, must we assume that because they have finally acknowledged their former blunder they have now become infallible? Wouldn't it be more sensible for the nation, through its Congress, to command these Army engineers to make the fullest possible use of every contributing factor to flood control? Many Army engineers have acknowledged that a comprehensive system of reservoirs can cut down the flood crests of the Mississippi after protecting the valleys of the tributaries—which levees never can protect. As a matter of fact, it has been shown, as conclusively as anything has been shown for spillways or levees, that reservoirs can reduce the flood crests of the Mississippi by from 6 to 10 feet. In any great flood such a reduction may well mean the difference between a harmless runoff and appalling devastation.

If we are wise, we will not be content with a system designed merely to handle the unbridled floods that gather in the Mississippi, but will demand a well-rounded, comprehensive plan devised to reduce those floods to a volume the levees and spillways can carry.

OFFICIAL CRITICISM OF CHAMBER OF COMMERCE PROPOSITION FOR REDUCED TAXATION UNWISE.

THE business men of this country are certainly as deeply interested in its prosperity and its future as officialdom in Washington can possibly be. They are the ones who have to pay the taxation which largely supports the Government. Their judgment on the matter of taxation is equally as good if not better than the judgment of Washington officials, and when they through the United States Chamber of Commerce after mature deliberation recommended a reduction in income taxation to the extent of \$400,000,000 official criticism of their action seems very much out of place.

These business men know full well that heavily reduced income taxation would increase the prosperity of the country and therefore increase the nation's income even on the reduced basis suggested. They know full well that the business interests of the country are being heavily overtaxed and that this bears to a large extent upon the lack of profit which many industries of the country have to face. Reduced taxation would mean increased prosperity and that point is so clearly understood by the business men that the way in which this recommendation has been criticised in official circles in Washington, as though business men had no right to make such suggestions, is very much more out of place than these recommendations could possibly be.

If Congress and the Administration would recognize that the business interests of the country are in a better position to decide on taxation than official life can possibly be and that business interests are just as vitally interested in the progress of the country as any Administration can be, due deference would be given to the views of the business leaders of America, and Congress would in that way save this country from many of the unwise laws which are passed to the hampering of business and the lessening of the prosperity of all business interests.

Without large profits on business there could be no adequate maintenance of the Government nor of educational or religious work throughout the land. The people who decry profitable business would if they had the power doom the country to poverty with all the retrograde movement this would inevitably bring of everything which tends to the advantage of the individual and the nation.

Notwithstanding the decision of the Administration that tax reduction should be limited to \$225,000,000, or the raising of that minimum to \$250,000,000 by the Ways and Means Committee of the Congress, an opinion by the Chamber of Commerce of the United States that \$400,000,000 can well be lopped off the tax impost should not be dismissed without serious consideration. This figure was reached by "an eminent commission" of business men, says the Chamber, after due investigation.

Through a questionnaire propounded to its members, the Chamber of Commerce "is committed to advocacy" of a program which may be summarized in this fashion:

1. Immediate repeals and reduction amounting to \$400,000,000, of which \$200,000,000 would become effective in the fiscal year 1927-28.
2. Reduction of corporation income tax from 13½ per cent to not more than 10 per cent, applicable to net income of 1927.
3. Repeal of remaining war excise taxes levied on particular businesses.
4. Repeal of Federal estate tax, leaving such taxation to the States.
5. Provision by Congress for full opportunity for the Joint Congressional Tax Committee to perfect proposals for revision of Federal tax laws and their administration.

In support of the proposal for a \$400,000,000 reduction, a

circular from the Chamber of Commerce says that "large yearly treasury surpluses show plainly that the Government is taking more tax money from the public than is necessary to run the Government and retire the public debt as already provided for by law." The surplus for 1927, it is cited, was "more than \$635,000,000" and surpluses for other years are given as \$250,505,000 for 1925 and \$377,767,000 for 1926.

"Already a surplus for the current fiscal year amounting to \$455,000,000 is in prospect," says the Chamber of Commerce, and, all things considered, it believes that a sufficient surplus is to be expected for 1929. "Thus," it continues, "while no deficit is anticipated should these reductions be made effective, it is obvious that in view of the credit standing of the Government and the low interest rates it can obtain, there would be no great cause for alarm, even though a deficit, through unexpected developments, should arise."

On its face, and backed by the investigation of a representative committee of the Chamber of Commerce, this statement may prove to be just as convincing to the people at large as the indignation of the President in refuting it. Retirement of the public debt is an avowed and conspicuous policy and practice of the present Administration, and this retirement, as the Chamber of Commerce well says, "is proceeding now in an orderly manner through the operation of the sinking fund and of a sound policy of devoting to debt retirement payments received from foreign countries on account of their debts." As long as the United States wrongfully insists on payment of the war "debts" of the Allies, they probably can be put to no better use.

As to reduction of the corporation income tax to 10 per cent, the Chamber of Commerce reminds the country that the rate of 13½ per cent is "higher than the wartime rate," and cites the fact that "in other directions, emergency war revenues have been to some extent abandoned." From indications and utterances through substantial, reliable circles, advocacy of substantial reduction of this form of taxation is virtually unanimous. Moreover, "the effect of reduction of the corporation income tax on our foreign trade must not be lost sight of," says the Chamber of Commerce, and this factor must carry heavy weight with every branch of industry and finance and business.

"The still existing war excise taxes provide a form of discrimination against particular industries and are no longer warranted by war conditions," says the Chamber of Commerce, and adds that the Treasury can well spare the \$87,000,000 annually gathered from such sources.

As to repeal of the Federal estate tax, "the National Chamber is firmly for the repeal," believing that "this field of revenue should be left to the States." The loss of revenue through repeal, it adds, on the basis of a Treasury statement, would be about \$7,000,000 for the next fiscal year and never would exceed \$20,000,000 a year.

"Prospective surpluses in the Treasury," concludes the National Chamber, "encourage extravagant appropriations. Congress would hesitate to launch expensive new enterprises if to do so would produce a Treasury deficit."

On the other hand, in consideration of tax reduction, profound heed must be given to a warning by John E. Edgerton, president of the National Association of Manufacturers, that tariff reduction should not be considered in the tax reduction process. First commending the members of the Business Men's Commission of the National Chamber for their "sympathetic work" and their "single purpose of performing a helpful service to the nation," Mr. Edgerton continues:

"With due regard for their high character and able work, I must express disagreement with particularly one important part of the Commission's conclusions. It is apparent that its reference to the relation of the tariff to the agricultural prob-

lem has been widely construed as suggesting the necessity for 'tariff revision.' If by that reference a general overhauling of the tariff is recommended, it would be a most unfortunate suggestion.

"I understand the Commission to have in mind a need for the readjustment of particular parts of the tariff. I keenly regret that in this connection that distinguished body did not make itself clear and did not find occasion to emphasize the most important of all questions which relate to tariff revision; namely, the method by which it shall hereafter be accomplished.

"Business can survive disaster, but it is always difficult for it to cope with uncertainty. Nothing is more essential to its well-being than confidence which is the greatest of all stabilizing influences. The continual talk about 'monkeying' with the tariff is a constantly disturbing factor and the sooner this admittedly economic question is removed effectually and permanently from the gridiron of political contest the better it will be for all business, big and little, and for the public at large. It is most unfortunate, therefore, at this time, that apparent encouragement has been given to those who are agitating for obviously political purposes, a Congressional revision of the tariff."

The taxation of the people must be reduced. The protection of the people, through an American tariff, must be further strengthened.

SOUTHERN STUDENTS SHOULD BE TAUGHT TO KNOW THE SOUTH.

IN the course of an announcement of a special issue planned for publication by the Charlotte Observer the following amazing statement is made about the lack of information in regard to North Carolina in the text books studied in the schools of that State. On this point the Observer says:

"The High School students of North Carolina find more information in their text books about the resources of the Congo than they do of their own State. There is not a text book in print which gives the slightest conception of the dramatic struggles made by the leaders of industry to place North Carolina in the front rank of States as a great industrial center and yet the rising generation is given practically no information about the State's billion dollar industry or the history of its establishment."

We do not for a moment question the accuracy of this statement, and yet it is a striking illustration of the unwisdom of educational work in the South which never has adequately set forth what the South has, what it is doing, and what the history of the Old South tells of the men who created the business interests of that section. We have often marveled to find that many professors in Southern colleges know so little about the Old South or the real achievements of the South of today. For years we have been pleading with Southern educational institutions to stress the importance of the history of the South from the industrial or business standpoint as to its past and its present. It is gratifying to see that the Observer has come out with such a bold statement, which should challenge the attention of every educator in North Carolina and challenge the attention of every father and mother in the South who should demand that their children be adequately trained and educated in a knowledge of the South.

DAIRYING POSSIBILITIES.

J. S. ALLGOOD, Yazoo City, Miss., in a letter dealing especially with the developments of dairying industries, writes:

"I can only say that the half has not been told about our possibilities. I have some very striking demonstrations on our farm, some that the dairymen should know about and see, as they are just possibilities put into practice, and at any time you have a representative in our community, I'll be glad to show him what we have done. Am always anxious to lend assistance to the dairy interest, believing it is the key to prosperity."

TWO GREAT ALABAMIANS.

WHEN the great huge Jordan dam of the Alabama Power Company, at its dedication on November 21, was named for an Alabama woman whose two sons have labored long and well to make the Alabama Power Co. in particular and the electric power industry in general the great factors in our lives that they are today, a tribute was paid to those two brothers which is too fine to be overlooked, tardy though it was in reaching us. Lewis E. Pierson, President of the Chamber of Commerce of the United States, said:

"In naming this the Jordan Dam, you are paying tribute to two men whose roots are deep in the soil of Alabama, the sons of Elmira Jordan and William Mitchell are the grandsons of the Reuben Jordan who fought with General Jackson in the war of 1812, and who settled more than a century ago in this Coosa Valley within ten miles of where we stand.

"It would be presumptuous of me to speak to his friends and neighbors of Col. R. A. Mitchell, vice-president of the Alabama Power Company. His life has been spent among you. His works speak for themselves. You are honoring him today in giving his mother's name to this structure on which he has labored so long and so well.

"Of the other living son of Elmira Jordan, the other grandson of Reuben Jordan, I can speak with greater knowledge. Sidney Z. Mitchell belongs not to Alabama alone, but to the entire nation.

"A few times in each generation nature in lavish mood combines in one man the qualities that go to the making of outstanding leadership. Vision and intellect and courage are joined with tireless energy and superior judgment. Then to the whole is added that intangible quality of heart or soul which inspires the loyalty and the confidence of others.

"Search through the history of the great industries which form the hub of America's progress, and in each you will find that the men who gave shape and form to their development were men who had these qualities. Whether you review the story of steel or copper, of oil or grain, of railroads or automobiles, of banking or of shipping, your thoughts go instinctively to a small group of individual leaders, blessed with the qualities I have named, who stand out as the men who led these industries onward to great and substantial achievement.

"Sidney Z. Mitchell has all these qualities, but with them he has one curious defect. He is hopelessly and incurably modest. He has been content to write his record in the twinkling lights of homes and the humming wheels of factories rather than in the columns of the press.

"He has always been a builder and a pioneer. A graduate of Annapolis, with all that this implies, he began his contribution to electric development as a factory mechanic in Edison's first electric plant. He built and operated the first electric system west of the Rocky Mountains. He was the first to pool the credit of scattered and struggling electric plants, and thus work out a scientific method of financing electric growth. He was the father of the principle of interconnection which has been the chief factor in the maintenance of cheap and dependable electric service.

"Electrical men admire him as a master of electricity. Bankers respect him as a genius of finance. Yet, I am sure it is not so much for these attainments that you are honoring him today, as it is for the high-minded, lovable, human qualities that have won your esteem, as they have won the affection of all who have come close to Sidney Mitchell the man."

TOO MUCH FINANCIAL SECRECY.

THE New York Journal of Commerce in referring to a statement issued in Poland to the effect that the Bank of Poland has a credit in its favor in 14 countries, including the United States, says:

"Here is another instance of the kind of management in the Reserve system which tends to cause trouble and to set up resistance in Congress. The public ought to be informed of the details of all such arrangements as this without having to wait for them from a foreign source, as was the case with the English credit, and without having to bring them out by main strength by Congressional investigation, as has been done in some other instances, and as is likely to be done in more."

Some Interesting New England Letters About Flood Matters and Centralization of Bureaucratic Control in Washington.

E. O. Goss, president of the Scovill Manufacturing Company, Waterbury, Conn., writes:

"I acknowledge receipt of yours of the 12th instant, and your suggestion that the matter is one serious enough to justify intervention by the Federal Government is noted.

"So far as New England is concerned, there is no reason for any intervention by the Federal Government in the matter of flood control. It is purely a question of the control and storage of the rainfall on the headwaters of our mountain streams. This procedure has been so thoroughly demonstrated during the progress of the late flood that no further proof as to the efficacy and the economic advantages arising therefrom in the production of power, as well as the prevention of floods, is needed.

"There is, of course, no doubt as to the propriety of the Federal Government's operation in the Mississippi Valley, through the alluvial plains. I do feel that this Mississippi project should not be in any way confused by its extension to such projects as that of the control of the Colorado by means of the proposed Boulder Dam, nor should the improvement of navigation in the Great Lakes through the operation of the negotiation of proper treaties with the Dominion of Canada be remitted. The Mississippi and the Great Lakes problems are essentially a Federal matter, but I am bound to take issue with you on the suggestion that any intervention is called for in New England, and especially because we do not in this section desire any further encroachment of the Federal bureau in the province of the rights and duties of our several States."

H. C. Daggett of the S. Morgan Smith Company, Boston, suggests a Federal fund to meet all emergencies of floods, earthquakes, etc. He writes:

"I have your letter of November 12 and note with interest what you say in regard to river control by the National Government.

"I have just returned from a four-day's trip through New Hampshire and Vermont, and have had an opportunity to see at first hand the damage done by the flood. This has not been exaggerated by the newspapers, except in some of the earlier reports, which were apparently sent out and based on unreliable rumors. In a general way, the later newspaper reports are no exaggeration. I was unable to go to Waterbury, Vt., where the greatest loss of life occurred and where much damage was done, but was in Montpelier and Barre, where, so far as financial losses are concerned, it is not materially different from Waterbury.

"We hear newspaper reports that 500 bridges were carried out in New Hampshire and Vermont, and last evening, by radio, it was stated that 900 bridges had been carried away. My own observation would lead me to believe that the latter figure was perhaps nearer the truth than the former.

"Farmers in the flooded section suffered severely; many of them lost their stock and some of them their buildings and they are left bankrupt. The railroads were very badly hit, but, of course, they have means to make repairs. A good many of the storekeepers are ruined; many of those with stocks of goods which they owned were cleaned out and either have to go out of business or start anew. No doubt, many of the merchants have acquired a certain amount of wealth which has not been destroyed and are able to start over again, but those whose only assets were their stock of goods have nothing with which to start new. The water in the streets of Montpelier and Barre was many feet deep, particularly in Montpelier, where the principal part of the town sets on a level plane only some 12 or 15 feet above the ordinary river level. These streets were filled with water to a depth of from 12 to 15 feet.

"The people in most cases seem to be taking their losses cheerfully and are hustling about getting their property cleaned of mud which was left over everything that was under water and they will undoubtedly in some way carry

on, and in a couple of years there will be very little evidence of this disaster.

"My personal belief is that the Federal Government should make good, so far as possible, the losses incurred in disasters of this nature. Not only the Vermont disaster, but also the Mississippi flood, the California earthquake, the St. Louis cyclone and other calamities which cannot be foreseen, and which are commonly known as 'acts of God.'

"I have not attempted to work out any formula, but it would seem that a small tax to establish an emergency fund could be levied by the Federal Government as an insurance to cover such losses. The sum total over a series of years would be many millions of dollars, but if distributed over the United States as a whole, by means of some sort of a tax, it would hardly be felt by the average citizen, but it means a whole lot to the victim who has lost everything that he has saved during the greater part of a lifetime.

"One word in connection with river flood control: There are some rivers in New England, as well as in other sections of the United States, that to a great extent can be controlled by the proper storage facilities, or, as in the case of the Mississippi River, by levees. There are two or three rivers in New England that are quite completely controlled by means of storage reservoirs, but it would be impracticable, if not impossible, to control such rivers as the Winooski, in Vermont, where the greatest damage occurred during the recent flood. Such a flood has never before occurred. It was not due to the breaking of dams, or the bursting of reservoirs, but to a great cloudburst, the discharge from which the river bed could not carry away, and the topography of the country is such that it would be practically impossible to build control reservoirs to take care of a flood like the recent one. For that reason, I believe it is only in the way of insurance, as above suggested, that the inhabitants can be protected."

New Government Map of Area in Central Texas.

Of the total of 256,896 square miles in the State of Texas 86,000 square miles has been topographically mapped by engineers of the Geological Survey, Department of the Interior. The area surveyed is represented on 167 individual published maps and a number of other maps in progress of publication, each separate and complete in itself but yet a part of the whole great topographic map of the State which is being completed as rapidly as funds are made available. The areas mapped are widely scattered over the State, one in the extreme northeast corner, two areas on the Oklahoma border, another in the extreme southwestern part, three areas in the extreme southern part, an important area around Houston, and a large block of nearly 50,000 square miles in central Texas. Other areas along the principal streams also have been surveyed.

An excellent example of topographic surveying and map engraving and printing is seen in the map of the Pickwick quadrangle, in north-central Texas. It is published on one of the standard scales adopted for the topographic maps of the United States, and may be secured from the Geological Survey, Washington, price 10 cents.

\$950,000 Hotel Proposed for Galveston.

Galveston, Texas.—The Galveston Playhouse Corporation, recently organized by local citizens, will erect the Hotel San Luis to cover an entire block. The main structure will be 330 by 74 feet, six stories high. It is estimated to involve the expenditure of \$950,000. A modern fireproof garage to house 100 cars will also be erected. There will be a ballroom with a seating capacity of 1500 persons. Space for convention exhibits will be provided in the basement. Each hotel floor will have 58 outside rooms. There will be a roof garden and promenade. A number of new streets will be built to serve the hotel.

Directors of the corporation include: Benjamin Sass, S. J. Williams, J. W. Butler, John L. Sterling, George D. Flood, J. E. Stratford and John Christensen.

Hedrick & Gottlieb, Houston, are the architects.

The Negro Question As It Relates to Negroes in the North and in the South.

By GEORGE GARNER.

Somewhat like a rash which indicates an illness, but is not, itself, the real disease, is an increasing activity in crime among negroes in the North which recently moved Judge Edwin O. Lewis of Philadelphia to serious utterance on the subject. Behind this colored crime wave, Judge Lewis discerned actual danger to the North in the tremendous migration of negroes to that section, and said, among other things:

"Large cities should have a right to say who shall enter their confines; otherwise, Philadelphia and other large cities, within the next 10 years, will not be fit to live in. Some of them are not fit to live in now."

To Judge Lewis' indicated belief that on the negro rests responsibility for white trouble with the negro in the North, I enter emphatic contradiction. The responsibility rests directly on the people of the North, themselves. And I who write this am a Northern man, born and brought up in New York city, without prejudice either for or against the negro, but speaking now from observation and study and knowledge gathered in residence of several years in the far South and in observation and study and knowledge gathered in years in New York, Philadelphia and Chicago. I am neither a negrophile nor a negrophobe.

The basic reasons for trouble with the negro in the North may be grouped, roughly, as follows:

1. Ignorance among Northern people of the racial characteristics and traits of the negro and consequent inability to handle him or guide him properly.
2. Ever increasing tendency in the North to accept the negro on terms of social and racial equality.
3. A feeling of undue importance given to the negro by politicians who curry favor with him in these days for his vote—a vote which they were wont to buy outright in days now past.

From these three evil roots has grown the deadly upas tree which now spreads its poison in ever growing circles through the North, especially, as Judge Lewis says, in the great cities.

According to the census of 1920, the most recent made by the United States Government, there were at that time 10,460,000 negroes in the United States, and of those over 9,000,000 lived in the South. Even allowing for the great migration of which Judge Lewis speaks, the preponderance of negro population in the South over that of the North still is tremendous. Yet, the South has no such trouble as has the North, nor is it even faintly threatened by any such trouble. For, (1) the South knows the negro from generations of close observation and study—and the negro knows the South and the Southern people; (2) the thought of racial or social equality with the negro is unspeakably abhorrent to white men and women of the South, and is not sought or thought of by the Southern negro; (3) politicians in the South do not seek to corrupt the negro by bribes of money or of promise of social favors.

To digress for just a moment, to illustrate the mutual understanding of the white man and the negro in the South:

A white-haired negro, stranded in a Northern city, wandered from house to house, seeking food and, perchance, lodging. At door after door he met considerate treatment, but was sent away empty. Finally, a door opened to his ring and a big man gazed down upon him. "Please, boss, can't you spare me a bite to eat," pleaded the negro. "Why, you damn rascal, what do you mean by coming to the front door—

get around to the back door, you black villain, and Martha will fill you up and we'll give you a bed." "Thank the Lord," exclaimed the negro, "I've found a Southern gentleman here at last."

The people of the South understand the negro and know how best to treat him, and the negro realizes, and appreciates the fact that the people of the South are his real friends.

Only in the last decade or so has the negro appeared in appreciable numbers in the North and he still is really a stranger in a strange land. Of his bad traits, the white people of the North are intolerant; they fail to make fair allowance for his shortcomings. On the other hand, the negro in the North is more and more accepted as a racial and social equal by the whites, some of whom, indeed, are maudlin in their "sympathy" for a "downtrodden race."

For the shortcomings of the negro, reasonable allowance is only right. Few generations have intervened since the days when his ancestors were wild savages, indulging in theft and even homicide as a regular part of their daily life, and applauding achievements in those lines as feats of ingenuity or skill. Time was, no doubt, when the early members of other races lived in the same degree of savagery; but, Christianity came and raised them to civilization, while the remote races in darkest Africa did not enjoy that blessing till several centuries had passed. The great lesson of *meum et tuum* has not even yet been mastered by the white man; far less should the negro be expected to realize its meaning, in the few generations in which it has been taught him. Reasonable allowance should be made for the negro's shortcomings, for two reasons: First, that this is only fair, and, second, that justice untempered by consideration of his only partly tamed instincts may provoke resentment, and its coincident obstinacy and resistance, in his soul. This is not the plea of a negrophile, but a plain statement of fact.

Treated with considerate authority, the negro is amenable and even affectionate to the white race; he accepts them as his superiors, racially and in intellect and civilization; he reposes almost childish confidence in their good intent—and instances innumerable prove that he demonstrates this affection with a devotion that makes him happy to give even his life to save a white friend. And so he accepts this authority without rebellion—almost, without question. A most interesting and illuminating illustration of the difference between the genuine negro of the South and the pampered negro of the North may be seen right in the national capital. In cities of the South, the negro is compelled to ride in a reserved section of a street car or a negro car in a train; in the North, there is no such distinction. So it is that in the South the negro accepts this provision without question and as a matter of course; whereas, in Washington negroes taking the electric cars into Virginia invariably crowd into coaches with white persons, even though well aware that they will be moved into the negro car as soon as the electric train crosses the bridge over the Potomac River. For a mile, they have the satisfaction of riding with the white folks; then, they must conform to the regulations of the South, which properly draw a racial dividing line.

So, while the people of the South treat the negro with a kindness and consideration which no other section bestows on him, it does not pamper him. When he does wrong, in punishing him, it gives due consideration to the instincts and training of countless generations of savage ancestors and to

the limited time in which his race has been taught the difference between right and wrong. But:

"How about the lynchings in the South?" someone may ask.

Official figures for 1925, the most recent recorded, show that one negro was lynched in the South in every 600,000 of negro population, and one negro was lynched in the North in each 500,000 of negro population in that year. In all comparisons, mere numbers mean little; it is the percentage or proportion that actually counts.

Most important of the three features aforementioned in consideration of the negro is that which has been placed second: Ever increasing tendency in the North to accept the negro on terms of social and racial equality. Therein lies trouble for the entire Nation—indeed, for all civilization, in the years to come. That the negro race and all other black and yellow races are inferior to the white race, there can be no question—were this not true, indeed, how could the white race, tremendously outnumbered by the others, maintain throughout the centuries supremacy over all the other races, in political power, in intellectuality, in morals, in morale—in every possible phase of human living? That the negro race is inferior to other non-white races may be open to question; but, between the white and negro races there prevails a gulf as impassable as that between the souls of Lazarus and Dives.

Yet, in the North, particularly in such great cities as New York, Chicago and Philadelphia, one sees negro children mixing freely with white children in the public schools; one sees pampered negroes in street cars occupying seats while white women stand and hang onto the straps; one sees them seated indiscriminately with white persons in theaters and other public places, and, most revolting of all, one sees apparently respectable and highly well-to-do white men and women dancing with negro partners in negro cabarets.

Under the guidance of my old friend Charlie Golden, "Chinatown Charlie," in years ago the "pal" of my old friend, the late "Chuck" Connors, I recently toured the "black belt" of New York—an excrescence which has developed since I lived in that city. Into three negro cabarets he took me, about 2 o'clock in the morning, and I found each one filled with a crowd of patrons, about 50 per cent, each, black and white. White women with every appearance of refinement danced and chatted almost intimately with negro men; white men with every appearance of prosperity and social standing danced and chatted—often, really intimately—with negro girls and women. Negro girl dancers circled the rooms, making suggestive movements of their bodies and suggestive gestures to the white men. The sight was too repulsive for detailed description in a decent publication.

"You and I remember New York in the old days—the old, 'wide open' days," said Charlie to me; "but, did they ever have anything like this in New York then?"

Speaking as a veteran newspaper man who knew New York inside out in the old, "wide open" days, I can say with emphatic confidence that old New York would not have tolerated such dives and such racial intercourse—and, if there had been any lynching, the white offenders would have been the victims.

In Chicago, only recently, the world has seen a practical politician—a man with a background of prosperity and education and good environment—openly toadying to the negro population and winning a reciprocal support in furtherance of his political ambitions. Conditions in Chicago, as I recently have seen them, are even worse than in New York. Boston, by the way, is the center and source of most of the maudlin sentiment which pleads for racial equality for the negro, while Philadelphia, as I recall, was the first city to place negroes on the police force. Even in Baltimore, on the Mason and Dixon line, negro theatrical companies play at the best theaters—and crowd them—and also I have seen negroes sitting with white persons on the main floor of the

operatic playhouse at a performance which savored of the importance of a "society" function.

This is not good for the negro. It is a defiance of the boundaries set by God through nature between the white and colored races. It is worse than an ignoring of that social distinction which restrains a white employer from admitting a white servant to a reception on a basis of social equality. Of the intimacy of the white and negro races in continental Europe, I say nothing; on that, we have no business to comment, further than to say that it bodes ill for the peace of the world and the maintenance of civilization in the years to come.

Much has been said of the wickedness of the United States in bringing the negro to America as a slave. That course was indefensible, no doubt. But, as good may be brought out of every evil, so might even that be made a blessing to the negro of this day, if he were treated properly. To cuddle him and to pamper him, is not to treat him properly, but is a bad thing for both him and the white race.

Finally, the importance given to the negro race by practical politicians who seek their favor, an instance of which has already been given: Time was when the negro was sought by the Republican party in such measure that he was considered an integral part of it. Now, in the North, the Democrats seek his favor with equal earnestness. Even in borderline Baltimore, the Democrats cater brazenly to the negro—indeed, at present, it may be said that 70 per cent of the negroes in Baltimore vote the Democratic ticket. The negro has got "the swelled head" politically, and that is a dangerous affliction for anyone.

Well may Judge Lewis warn the country of the danger in the negro situation in the North. But, he should place the responsibility on the white people of the North, and not on the negro's shoulders or conscience.

Great Income From Turkeys.

Auburn, Ala., November 26—[Special.]—The Black Belt section of Alabama is rapidly becoming a turkey center, as well as a cotton and a dairying area. For the Thanksgiving trade 20 carloads of turkeys were shipped from this section under the auspices of the extension service of the Alabama Polytechnic Institute, Auburn, and the State and county farm bureaus to the markets in the North, East and South.

The turkeys netted the growers 30½ cents a pound at the car door and the lot returned them around \$90,000, the 30,000 birds weighing 270,000 pounds. Others will be sold for the Christmas trade and they probably will be larger.

The black belt of Alabama appeared first as a turkey center in the fall of 1926, when the extension service workers and the farm bureau representatives put the marketing on an efficient basis. At that time seven cars sold for 26 cents per pound. Prior to that there was no established market. Natural conditions have been found to be very favorable for producing turkeys, of which many are raised by farm tenants, and it is said not to be unusual for a lot of turkeys to bring to the owner more than he received for his share of the cotton crop.

Mississippi County Levies Taxes for Advertising.

Hattiesburg, Miss.—The Forrest County Board of Supervisors, acting upon the advice of a group of leading business men of this city, has added half a mill to the general county levy for the purpose of advertising the resources of Forrest county. It is believed that about \$8500 will be available from this source in the next 12 months. Authority to boards of supervisors in Mississippi to make levies for advertising purposes was given in an act passed by the 1926 session of the legislature.

Proposed Farm Relief Legislation.

By DR. HARVEY W. WILEY, Washington, D. C.

When a manufacturer produces an article, if he is a good business man, as most of them are, he knows exactly what it costs. He puts a price on the article to cover the cost, plus a reasonable profit. There is a kind of Free Masonry existing between manufacturers of the same article—there is a tacit understanding that there will be no cutthroat tactics. The result is that all manufacturers of that particular article fix practically the same price. There is no law authorizing them to do this. There is, however, a principle of ethics which makes it highly advisable that there shall be no price-cutting tactics. Whatever the article may be, a plow, a piece of furniture, an automobile or a threshing machine, a tractor or a teapot, the same principle prevails.

Under present regulations a railroad or a street railway, a bus line or a steamboat line or any other method of transporting passengers is permitted to submit a valuation, with or without the approval of court, showing the price of its plant and the cost of operation. It is then authorized by existing law to charge for this service a fare which will practically yield the corporation a profit of 6 or 7 per cent. It may well be understood that the value set upon the assets of the company is quite comprehensive and all-embracing. The public, if it desires to ride, pays the fixed fare. By a similar line of procedure freight charges are set. Public utilities furnishing gas, electricity or water are permitted by law to do the same thing and charge for their services sufficient to earn a generous dividend.

Unionized labor sets the price of both skilled and unskilled labor and the hours of employment. Those who employ labor pay the stipulated price and accept the hours of labor. In addition to this, the importation of laborers from foreign countries is restricted by law. The number of persons learning skilled trades is also limited with the sanction of the law. Unorganized labor profits by the example of organized labor, both as to the amount of compensation and as to the hours of employment. The result is that skilled labor is often better paid than professors in our colleges and universities, and all this by sanction of law.

We come now to the owner or cultivator of agricultural land. By no State or national law and by no custom is the owner or renter of agricultural land permitted to set any price on the products he has to sell. He is entirely at the mercy of the broker, the carrier and the corporation handling, manufacturing and distributing the products of his labor. The farmer is proverbially adverse to unionization. It is all well enough to say that if the farmer will unionize and co-operate he can eventually fix the price of his own product—if we wait for that event to come about by voluntary action on the part of the farmer, the millennium will beat us to it. Within the limit of one human life, no such happy event can be expected.

Fortunately, the United States of America has in every State foundations given by grants of land and money intended for the scientific study of all agricultural problems. The law organizing the Department of Agriculture reads as follows:

"There shall be at the seat of government a Department of Agriculture, the general design and duties of which shall be to acquire and diffuse among the people of the United States

useful information on subjects connected with agriculture in the most general and comprehensive sense of that word and to produce, propagate and distribute among the people new and valuable seeds and plants."

With this broad license and mandate Congress has given to the States vast areas of public lands and large sums of money to diffuse in each of the States knowledge of scientific agriculture and agricultural economics in the broadest sense of the word. Agricultural colleges and agricultural experiment stations are now established in every State. They are in full operation. They have, as a part of their personnel, experts in all the branches of science connected with agriculture, of which chemistry is the chief. They have a body of agricultural economists skilled in the art of determining the cost of agricultural products. These experts are already functioning, capable in the highest scientific manner of reaching sane and scientific conclusions which may guide the farmer in estimating the actual cost of the products of his field. Thus, on broad, scientific and irrefutable foundations, he can proceed to fix a just price upon the products of his labor.

As the farmer is never going to do a thing like this by his own movement and will, it is highly desirable that the authority which first conferred upon the farmer the means of learning scientific agriculture shall proceed to unionize the farmer in a manner by which he can protect his own interests and yet not intrude on the rights of others, by securing a proper profit for his work. By the adoption of the proposed legislation the farmer becomes unionized. He learns the exact cost of his products. He is authorized to receive a just price therefor. He, therefore, becomes the complete capstone of the arch which already includes all other industries except agriculture. It is high time the farmer should share in the protection given to industry.

If there is anything in this plan which is repugnant to the Constitution, then all these other methods of unionizing industries are likewise unconstitutional. Why should the Congress of the United States refuse to do for agriculture what it has done for every other industry?

The proposed plan is simple; anyone can understand it. It is also effective. It is not claimed that it will save all farmers from bankruptcy. The protection now afforded the industries does not prevent bad management from resulting in proper punishment. There are failures in banks, even joint land banks, railroad companies, gas works, street railway, and bus lines, and occasionally a labor union is disrupted. This plan gives to the farmer the minimum cost of well-directed scientific agriculture. It does not create any additional offices. It utilizes activities that are already established. It does not appropriate any of the taxpayers' money. Any sums used in favoring export are derived from a tariff on agricultural products. It is the farmers' union which fixes the price. This plan protects the farmer in securing that price. It may add somewhat to the cost of living. Its adoption will save the good farmer. It will turn the farm deficit into a profit. It will make agriculture an industry which will attract capital. It will keep capable farmer boys on the farm. It will lead capable farmers' daughters to seek agricultural homes. It recognizes the farmer's wife as worthy of her hire. It will add zest to all efforts of land grant colleges and experiment stations to increase the fertility of the soil. By increased productions the cost of farm products will be cheaper. In the end the great body of non-agricultural consumers, more than 70 per cent of all our people, will get cheaper food. Finally, it will make every farmer eager to join the union.

From an address before the Association of Official Agricultural Chemists.

His present helpless condition will fade away. As proprietor of the great fundamental industry which is the basis of all other industries, his influence will become dominant.

The proposed legislation for farm relief is titled: "An Act to charter a national agricultural union, to stabilize agricultural industries, to enable the farmer to ascertain the cost of the products of his fields, to restrict the importation of competing agricultural products, to increase agricultural efficiency and for other purposes."

The bill then provides:

"That agricultural welfare be regarded as affecting the public interest and that it be accorded all the rights and privileges of a public utility; to this end, that an agricultural union shall be chartered in each of the several States, the members of which shall be citizens thereof, and that in favoring this purpose the competent authorities of each State be empowered to request and instruct the trustees of the land grant colleges and the agricultural experiment stations of the various States to select members of the faculties of these colleges and agricultural experiment stations skilled in agricultural economics who shall be the executives of the union. When not less than three of such experts are thus appointed as president, vice-president and secretary of the union, and not less than 12 bona fide farmers are enrolled as members, said charter is to be given. These officers with such others as may be designated shall determine the cost of production of the following products; namely, milk and milk products, sugar beets, sugar and sorghum cane, sugar and sugar cane and sorghums sirups, all cereals, hay, poultry and eggs, hogs and hog products, beef and beef products, sheep and mutton products, wool, cotton, flax and any other agricultural staple, not perishable, 75 per cent of which is used within the United States or its insular possessions, which may be added to the above list. These experts shall carefully take into consideration the cost of agricultural products according to established principles of scientific agriculture. They shall not consider the cost of products of so-called 'gentlemen farmers,' or agricultural estates kept up for show or pleasure. They shall take into consideration the compensation of the farmer himself, his wife, sons and daughters over 14 years of age employed on the farm and in the home. Their services shall be valued at the same rate as similar services hired and paid for by the farmer; and all hired services shall be included in the cost of production; also all taxes, insurance and interest on borrowed money, fertilizers, lime, seeds and inoculating materials, depreciation of implements, fences and buildings and damage by storm and flood. These experts shall segregate the cost of production so far as possible for each industry mentioned. These officials shall also provide for co-operative buying farm supplies for the members of the union. The members of the union shall pay no fees nor shall they be assessed in any way for the compensation of the executives. Any additional compensation for these executives shall be provided by the trustees of the land grant colleges and experiment stations with which they are connected.

"Having ascertained the cost of production of these staple farm products as nearly as possible for each State, the average cost of all the States shall be determined with reference also to the quantity produced, so that the mean cost of each individual product for all the States may be known.

"The executives of this union are authorized under this charter to fix the selling price of each of the agricultural products before mentioned at not less than the minimum cost of production as ascertained above. In addition to this, shall be added a reasonable profit of 10 per centum on the assessed value of land, furniture, harness, live stock, farm implements and farm buildings, as determined by the assessed value thereof for taxable purposes.

"The average cost of producing each article of farm product above mentioned, shall be taken to determine the amount of import duties which shall be levied on all imported articles of the same kind brought into the country for consumption or otherwise, either raw or manufactured, to make the cost thereof the same as that of the domestic product. The amount of this tax should be sufficient to equalize the price of the imported article so that it may be upon the same basis of value as the article produced at home. If the subsequent investigations of the cost of production made in the way already provided, and which should be made at least once every two years, should lead to a different cost value, auto-

matically the import duty on the imported article would be changed correspondingly.

"When any farmer or tiller of the soil sells the products of his labor direct for exportation to a foreign country, an equalization sum corresponding to the difference between the price paid in the foreign markets and the price fixed by the union, if the latter should be larger, shall be given to the farmer or tenant selling direct for exportation, provided that this sum shall be taken from the import duties on agricultural products of the same kind, fixed as above described; but in no case shall the sum of such equalization items be greater than the total import tax collected on agricultural products of the same kind as the exported article.

"This Act shall not be construed to prevent the producer of any of the above mentioned articles, nor any subsequently added thereto, from disposing of said articles at higher prices than those fixed."

\$750,000 Baltimore Store Under Way.

Construction is progressing satisfactorily on the new \$750,000 store in Baltimore for Hecht Brothers at Baltimore and Pine streets, according to the Consolidated Engineering Company, Inc., of Baltimore, general contractors for the structure. Sub-contracts have been awarded as follows:

Reinforcing steel—Kalman Steel Company, Baltimore.
Millwork—Otto Duker and Company, Baltimore.
Painting—J. G. Valliant Company, Baltimore.
Plastering—Kraft-Murphy Company, Washington, D. C.
Cut Stone—James O'Meara, Baltimore.
Marble, Tile and Terrazzo—J. B. Dunn & Sons, Baltimore.
Glass—Pittsburgh Plate Glass Co., Baltimore.
Metal frames and sash—Campbell Window Corporation, Baltimore.
Kalamain work—Wm. F. Zeller Company, Baltimore.
Roofing and sheet metal work—W. A. Fingles, Inc., Baltimore.
Waterproofing—Western Waterproofing Company, St. Louis, Mo.
Structural steel and miscellaneous iron—Dietrich Brothers, Baltimore.
Electric wiring—Blumenthal-Kahn Electric Company, Baltimore.
Sprinkler system—Grinnell Company, Baltimore.
Plumbing—H. E. Crook Company, Baltimore.
Heating and ventilating—Riggs, Distler Company, Baltimore.
Hardware—Hubbard and Eagleston, Baltimore.
Rolling steel doors—J. G. Wilson Corporation, Philadelphia, Pa.
Fire doors—Richmond Fireproof Door Company, Richmond, Ind.
Lumber—James Lumber Company, Baltimore.
Metal forms—Deslauriers Column Mould Co., New York.
Freight elevator doors—The Peelle Company, New York.
Passenger elevators—Atlantic Elevator Company, Baltimore.

The building will be six stories and basement, serving as a warehouse addition to the company's present building at this location. Abbott Merkt & Co. of New York are the architects-engineers, and Smith & May of Baltimore are the consulting architects.

Alabama Satsuma Oranges Plentiful.

The satsuma orange industry in Mobile and Baldwin counties, Alabama, has enjoyed another good season and the same is true of the industry elsewhere along the Gulf coast. The Alabama crop this season is estimated at 300 carloads.

It has been about 20 years since the beginning of the industry in Alabama and most of the developments have taken place during the last 10 years. During its history the satsuma orange in Alabama has gone through extreme circumstances, among them being a severe storm and an unusually cold snap, as well as more freezes. Despite these, it has established itself in a new country, among strangers who at the beginning knew very little about it and had to learn by experience.

\$1,000,000 18-Story Building for Fort Worth.

Fort Worth, Texas.—Excavation will start promptly for an 18-story building to be erected by the Fort Worth Properties Company for the Fort Worth Power and Light Company, and construction operations will commence within two months. Although plans and specifications have not been completed, it is estimated that the structure will cost \$1,000,000. Wyatt C. Hedrick, Inc., will prepare plans and specifications.

American Manganese Situation With Special Reference to Ore Occurrences in Arkansas.

By ALBERT W. GILES, Ph. D., Director of the Department of Geology, University of Arkansas.

The writer recently returned from a field season spent largely in the manganese producing area of Batesville, Ark. The usual accumulation of technical journals was encountered, the perusal of which ordinarily does not afford astonishing reading. But to one who had just visited the plants in one of the leading manganese producing areas in the United States, as is admittedly the proper rank to assign the occurrences of Arkansas, the information conveyed by the MANUFACTURERS RECORD in its article of August 11, and by the Engineering and Mining Journal in articles of August 6 and 13, was as astounding as it was impressive. Not only the manganese producers, but also the American public are indebted to these publications for having the courage to champion the cause of the manganese producers and those who are in sympathy with their efforts, so vital to national safety.

Why should the American manganese producers be confronted at this time with a scheme to "steal their tariff"?—a surgical operation of an economic nature which their opponents, according to the Engineering and Mining Journal, regard as "much like taking candy from a child." What is there behind this astounding and mischievous move which is reported as having the sympathy of a financial group with large foreign concessions?

It is apparent from the proceedings of the Cleveland meeting of the American Institute that a "sharp difference of opinion prevails as to the necessity or utility of a tariff on manganese ore"; but it is by no means apparent that much of the adverse opinion is not colored by representations of the foreign concessionaires. The survival of the American manganese industry is dependent on the maintenance of the present protective tariff on the importation of manganese ore. The producers, confronted with the situation, the outcome of which, if carried out as planned by their opponents, would result in the complete cessation of their business and the loss of investment representing millions of dollars, immediately organized in an effort to protect their business and their investment. The Washington meeting early in August, as the MANUFACTURERS RECORD has shown, was a meeting to save the American manganese industry.

It is understandable why certain interests with large foreign concessions would like to dump ore on Atlantic docks duty free, but it is not understandable why these interests should have sympathy or encouragement from either organizations or individuals in this country. It is true that the domestic production of manganese ore has not attained the importance that American interests have desired, yet enormous forward strides have been made during the last 10 years, and the situation is very hopeful. Much remains to be done, both in scientific research and in business organization; but the strategic and economic importance of their product fully justifies their desire for adequate protection and sympathetic attitude during years of experimentation and financial struggle necessary in every large enterprise involving the development of natural resources on an extensive scale.

Geologists of the United States Geological Survey have examined many occurrences of manganese in this country, and where detailed appraisals have been made that organization is in a position to know the facts regarding the ore reserves in these occurrences. The Survey has estimated the total reserve of manganese ore in the Batesville district

to be at least 250,000 tons of ore containing 40 per cent or more of manganese, and 170,000 tons of available ore containing less than 40 per cent of manganese. Although this estimate was based on careful study of the area by Hugh Miser, one of the most capable geologists ever attached to the Survey, yet the estimate is far too conservative. In the computation little account was taken of the surficial accumulations of low grade ore which was not marketable at the time Mr. Miser made his estimate, and therefore was very properly excluded from the estimate. These accumulations are of unknown extent, but undoubtedly cover scores of square miles in the region. The extraction of these low grade ores by steam shovels and their beneficiation are now receiving the attention of leading producers in the Batesville district. One plant recently completed is to be devoted exclusively to experimental work along this line. In another plant, representing a large investment, neither time nor money has been spared in the development of new methods to raise the manganese content of the output. The vast reserve of low grade ore in the region fully justifies this pioneer work.

About 200 men are employed in the manganese operations around Batesville. The extent of the operations represents a large financial investment. To continue the operations the maintenance of the present tariff on manganese is vital. One producer recently told the writer: "The removal of the tariff will mean the shutting down of every plant in the Batesville district." Not only will manganese mining cease in Arkansas, but also tariff removal will have the effect of seriously crippling the industry throughout the whole country, and would make importation the chief reliance of the domestic consumer. In case of war with a first-class power, this importation would immediately be curtailed, leaving the country without a domestic source of supply and without the elaborate equipment necessary to furnish a supply of essential purity of this very vital "war mineral."

At the Washington meeting on August 2 the attitude of the producers was unmistakable, and the State geologists of the manganese producing States expressed themselves openly as heartily in favor of protection of an important industry in their respective States. The position of the State geologists may be illustrated by the attitude of George Branner, State geologist of Arkansas, who was quoted to the effect that "development of a method of beneficiating low grade manganese ores would have a great effect in Arkansas, where there was a large tonnage of such material. If, in addition, a way were found to utilize the residual clays, the available tonnage would be much larger."

At the present time the Tariff Board has representatives in the field studying the situation. There is every reason for believing that an impartial, fair and thorough investigation by experts will be made. The result of such an investigation can hardly point to other outcome than the maintenance of the present none too large protective tariff. The survival of the industry demands it, and it has much broader economic importance and strategic application than the preservation of the industry itself.

An issue of \$280,000 4½ per cent bonds has been sold at par by the Polk County Board of Public Instruction, Bartow, Fla., to the Hanchett Bond Company, Chicago, Ill., and \$40,000 6 per cent bonds to the Brown Crummer Investment Company, Wichita, Kan., and Prudden & Co., Toledo, Ohio, at 95.6.

Extensive Development Program Outlined for Dallas, Texas.

Prospective expenditures of \$23,900,000, over a period of nine years, for constructive expansion of Dallas, Tex., were disclosed by Major E. A. Wood, city engineer, in an address at the recent convention of the American Society for Municipal Improvements, in session at that city, and as previously referred to in the MANUFACTURERS RECORD. The program, known as the "Ulrickson plan," was prepared by a committee named by the Mayor of Dallas, the president of the Chamber of Commerce, the chairman of the City Plan committee and the president of the Kessler Plan Association, and was designed to be presented to the people of the city in a referendum the middle of the present month.

The items and amounts submitted in the plan are as follows:

Public schools, new buildings, etc.	\$1,900,000
Street openings and widenings, building lines and underpasses	5,500,000
Parks and connecting boulevards	1,500,000
Sanitary sewer system extensions and improvements	1,000,000
Storm water drainage (city's share of cost of \$8,500,000 program)	3,500,000
Street paving (city's share)	3,000,000
Fire department (new central station and other improvements)	350,000
Additions to incinerators for better garbage disposal	150,000
Libraries, additions and equipment	500,000
Institute of Fine Arts building and equipment	500,000
Municipal auditorium (downtown building and equipment)	1,000,000
Municipal airport	400,000
Hospitals (additions to Parkland and other city-county units and improvements of grounds)	400,000
Water system (extension of mains, enlargement of pumping facilities, purification plants, etc., to be repaid from water revenues)	4,000,000
For working staff, including engineering and legal services over period of improvements	200,000

Total estimated cost of improvements..... \$23,900,000

Outstanding in the details of the plan is a provision that any bonds authorized by the vote of the people shall be issued from year to year only as actual physical work progresses, with a maximum of \$4,000,000 for any individual year and the same restriction is recommended in the letting of contracts, except those affecting a \$4,000,000 water bond issue. These limitations will prevent the handling of all the bond moneys by any single administration, either in the award of contracts or in the expenditure of money. Through the enactment of six city planning measures by the State legislature, public improvements may be pushed vigorously and, by allowing the entire citizenry to vote on all the items in the program and by limiting bonds to \$4,000,000 a year, legal obstacles to voting \$23,900,000 at one time are entirely removed.

As described by Major Wood, one of the most interesting features of the plan is the method by which the money is provided not only for amortizing the bonds, but also for providing additional current revenues with which to carry on governmental functions, which will multiply as the improvements are made. By this, the present tax rate of \$2.47 is to be continued, and assessments are to be raised annually, increasing by 53 per cent in 1928-29, to 58.6 per cent in 1935-36, and dropping to a 58.2 per cent increase in 1936-37. A citizens' committee will be created to supervise expenditures, the letting of contracts, the expenditure of the proceeds from the bonds and the employment of a \$900,000 revolving fund in the street-widening appropriations.

Among the items enumerated in the development program are:

Street openings, widenings, extensions, building lines and underpasses, in which alone there are 82 items, exclusive of the revolving fund for the purchase of condemned properties.

Parks and connecting boulevards, in which \$700,000 will be provided for additional parks, \$550,000 for improvements and \$250,000 for connecting boulevards and parkways.

Sanitary sewer system, on completion of which there shall be introduced slight charges for toilets, sinks and baths, for the financing of the new system.

Storm water drainage, with \$3,500,000 for drainage purposes.

Street paving, with an allotment of \$3,000,000.

Fire department, with \$350,000 for a new central fire station and a modern fire alarm system.

Garbage collection and disposal, including the modernizing of collections and an additional plant for Western Oak Cliff.

Public library and institute of fine arts and municipal auditorium, to enlarge the central library and establish four branch libraries, with \$500,000 for an institute of fine arts and \$1,000,000 for the auditorium.

Municipal airport, with \$400,000 for purchase and equipment.

Hospitals to be modernized and the grounds to be beautified. Water system, with a closed conduit from Lake Garza and an additional pumping and purification plant.

Each item, says Major Wood, has been most carefully considered and a method has been provided for its accomplishment, and little has been left to chance.

Editors to Tour Tennessee.

Following a recent article in the MANUFACTURERS RECORD in regard to the convention of the National Editorial Association at Memphis, Tenn., in 1928, Hugh Doak, provisional field secretary of that organization, writes, in part, as follows:

"When we invited this convention to meet in Tennessee, it was our intention to show the editors of the United States something of the marvelous opportunity for development in this State. We have planned a tour which will include a visit to Helena, Ark., where they may see a section of the district flooded by the Mississippi River, and the tour will also include many points of national interest, like Reelfoot Lake, Muscle Shoals, Shiloh National Park, the immense phosphate fields of Tennessee, one of the largest milk plants in the United States, at Lewisburg; the most attractive university town at Sewanee and the unsurpassed natural beauty of Chattanooga; one of the largest copper production districts of the country, in Copper Valley; the aluminum plant at Alcoa; the great marble quarries of Eastern Tennessee; the most complete publishing house in the United States, at Kingsport; the large rayon plants at Elizabethton and Jacksontonville, and other interesting points in Tennessee.

"This tour will include an agricultural district that is not surpassed by any place in the United States; it will show the editors the center of the leading dairy districts of the South; it will take them into a district where a wider variety of mineral deposits exist than any other place of similar area in the world, and it will show them something of the great industrial progress that Tennessee has made in the past 10 years."

Texas' \$10,000,000 Turkey Crop.

Victor H. Schoffelmayer, agricultural editor of the Dallas News, writes that Texas this year will produce between 800 and 900 carloads of turkeys for outside shipment, having an approximate value of \$10,000,000. He adds that G. R. Warren, secretary of the Denton Chamber of Commerce, believes the Southwest this season will produce about 50,000,000 pounds of turkeys, of which Texas will produce 30,000,000 pounds, or one-third of the nation's turkey crop.

The big turkey dressing plants at Brady, Cuero, Llano, San Saba, Ballinger, Hico, Gatesville, Lampasas, Waco and other centers are beginning to operate for the season.

\$500,000 Office Building for Tulsa.

Tulsa, Okla.—The Shallenberger Construction Company has the general contract for a \$500,000 building for the Oklahoma Natural Gas Corporation, 7th street and Boston avenue. It will be a 10-story structure of terra cotta, brick and cut stone with a reinforced concrete frame. A. M. Atkinson is the architect.

A Mexican Judgment Vindicated.

By COURTENAY DE KALB.

In the MANUFACTURERS RECORD of February 10, 1927, a conclusion was offered in an article entitled "Mexican and Nicaraguan Situation Demands Statesmanship of High Order" which included the following paragraph:

"It is confidently expected that the Mexican Supreme Court will not reverse itself in regard to the retroactive application of laws and that it will apply the prohibition in the Constitution against retroactive operation of laws to the oil and land law. It must be understood that the Mexican Supreme Court cannot be expected to find the law unconstitutional, for it is a general law, defining the respective rights of the State and of claimants to subsoil rights, together with other important provisions. That law will stand. It is part of Mexico's fundamental law. It is only the possibility of retroactive application that will evidently be clarified by denial. The only possibility of Mexico taking a widely divergent attitude from that outlined above would be that she has an understanding with foreign Powers which would support her in the event of our pushing our case in a manner that would offend the national *amour propre*."

On November 17 the Mexican Supreme Court has completely justified the conclusion to which I was led in the above quotation, which was based upon a knowledge of Mexican respect for fundamental law. By unanimous decision the Mexican Supreme Court finds for the plaintiff in the case of the Mexican Petroleum Company, which is of American ownership, asking for an injunction or "amparo" against the cancellation of drilling permits issued to that company by the Department of Industry, Commerce and Labor.

In view of the sweeping character of this decision it is fair to anticipate confirmation of the same position toward the retroactive effect of Sections 14 and 15 of the Constitution in other similar cases. The Mexican Constitution of 1917 itself forbids retroactive legislation, in addition to which the fundamental law as set forth in the Civil Code

likewise protects individuals and all legal persons against retroactive effect of legislation. Considering the extreme regard held by Mexicans for the letter of the law, and in view of the general litigious character of the people, which augurs reliance on the ability of the individual to secure justice through the courts, it was logical to believe that the Court of last resort would not fail to hold in accordance with the fundamental law of the land. Personal experiences in litigation, in connection with land and mining matters, some of which have been greatly involved, had led me to depend on the ultimate justice of the high court of the Mexican Republic. That view has now received fresh support in the face of one of the most bitterly contested struggles that has ever taken place. The temper of the Mexican people, and presumably of the judges themselves, has been sorely tried by the accusations, freely made, of dishonest purposes on the part of that Government. Diplomatic episodes have occurred that have tended to widen the breach between the two countries, such as the flurry made by the Secretary of State in addressing the public at large instead of making representations in the correct way through the proper diplomatic channels.

It is fair to say that, with representation by men possessed of a fine sense of diplomatic propriety, the friction would have disappeared in the early stages of the dispute, and the decision now rendered would have come sooner to smooth the course of diplomacy so as to have engendered growing friendship to the manifest advantage of the United States and of Mexico. It is assumed that the object of President Coolidge's appointment of a man of the highest ability to the Mexican Ambassadorship signalized an intention to avoid future pitfalls, and in a restoration of goodwill between the two countries both will gain in prosperity and strength. It is to add to our own strength in the Western Hemisphere to possess the cordial friendship of every Latin-American State.

\$2,000,000 Building for San Antonio.

San Antonio, Texas.—Work will be under way shortly in connection with the erection of a 31-story office and mercantile building for Smith Brothers Properties, Inc., to cost \$2,000,000. It will be this city's tallest structure, and is part of the company's plan for the development of Bowen's Island. The McKenzie Construction Company has been awarded the general contract, and the structure is to be ready for occupancy by January, 1929. The interior arrangements will be carried out to suit tenants. The site is 137 by 72 feet. The first four floors will be devoted to a retail store, and the next two floors to offices and merchants' displays. The next 14 floors will have 24 offices each, the next 5 stories, 20 offices to a floor and the remaining floors will have nine offices each.

There will be two groups of self-leveling elevators, one group to serve the mercantile section of the building and the other to serve the office floors. Full outside offices will be available on every floor, because of the octagonal shape of the structure, and the mechanical equipment and elevators will be placed in the center.

The building will have a frame of reinforced concrete and

structural steel. The first three floors will be faced with stone starting from a six-foot base course of polished granite. The balance of the outside walls will be of light colored brick, with stone used as a trim. The roof of the tower will be finished with a glazed varicolored tile.

\$600,000 Apartment House Group for Baltimore.

Construction is under way on an apartment project for Henry M. Reinhart, Baltimore, which will ultimately involve the expenditure of \$600,000. The unit now being constructed will contain 64 suites, suitable for either light housekeeping or transient tenants. This is the second of four units to be erected in Baltimore and is planned after modern efficient units which are popular in New Jersey and Philadelphia. Plans for the third unit, to contain 96 apartments, are now being prepared.

The plan for the Baltimorean Apartment Hotel was created by W. V. Hipsley of the United States Mortgage and Title Company, Baltimore, and executed by Fred E. Beall, local architect.

\$1,250,000 Bank and Office Building Completed at Greensboro.

The new bank and office building erected at Greensboro, N. C., for the Greensboro Bank and Trust Company, at a cost of approximately \$1,250,000, has recently been completed by the Angle-Blackford Company of Greensboro, general contractors for the structure. Construction is of steel, granite, terra cotta and face brick, the banking room to have two entrances with marble steps and polished bronze gates and rails. The building is 14 stories and basement, 72 by 144



NEW BUILDING OF GREENSBORO BANK AND TRUST COMPANY.

feet, with composition floors and Barrett roof. C. C. Hartmann of Greensboro is the architect, and Van R. Saxe of Baltimore, Md., engineer. Sub-contractors and firms supplying major items of material include the following:

Mail chute—Cutler Mail Chute Company, Rochester, N. Y.
Terra cotta—Federal Terra Cotta Company, New York, N. Y.
Miscellaneous and ornamental iron—J. D. Wilkins, Greensboro.
Glass and glazing—High Point (N. C.) office of Pittsburgh Plate Glass Company.
Hardware—Odell Hardware Company, Greensboro.
Waterproofing—R. B. Holtz and Company, New York.
Roofing and sheet metal work—J. H. Griffin, Greensboro.
Painting—J. E. Hatch, Greensboro.
Marble and tile—The McClamroch Company, Greensboro.
Composition floors—The Duraflex Company, Baltimore.
Plastering—James A. Smith and Son, Durham, N. C.
Millwork—Oettinger Lumber Company, Greensboro.
Structural steel—Dietrich Brothers, Baltimore.
Erection of steel—J. W. Markham, Greensboro.
Reinforcing steel—Norfolk branch of Concrete Steel Company, New York.

Plumbing—Crutchfield Plumbing Company, Greensboro.
Casement sash—Crittall Casement Window Company, Detroit, Mich.
Kalamein doors—Knoburn Products Company, Hoboken, N. J.
Elevator enclosures—United Metal Products Company, Canton, Ohio.
Hollow metal windows—S. H. Pomeroy Company, New York.
Heating—B. MacKenzie, Greensboro.
Common brick—Borden Brick and Tile Company, Goldsboro, N. C.
Cement—Signal Mountain Portland Cement Company, Chattanooga, Tenn.
Electric wiring—Michael & Bivens, Greensboro.
Face brick—Sumter Brick Works, Sumter, S. C.
Elevators—Greensboro office of Otis Elevator Company, New York.
Scaffolding—Patent Scaffolding Company, Atlanta, Ga.

Exports of Cotton and Cotton Goods.

For the 10 months ending October domestic exports of cotton, cotton cloths, yarns and thread show an increase compared with the corresponding period of 1926. A decrease was reported in cotton hosiery exports and in sewing, crocheter, darning and embroidery cotton. The total value of cotton manufactures exported during the 10 months ending October was \$109,722,398, compared with \$109,404,395 for the 10 months ending October, 1926.

	—Ten months ended October—	
	1926	1927
Raw cotton, including linters (bales).....	6,030,791	7,708,579
Raw cotton, including linters.....	\$592,140,732	\$635,473,460
Cotton manufactures, total.....	\$109,404,395	\$109,722,398
Cotton cloths, total (sq. yds.).....	429,342,703	471,488,838
Cotton cloths, total.....	\$63,258,893	\$63,182,251
Tire fabrics (sq. yds.).....	1,691,374	3,791,704
Tire fabrics.....	\$745,908	\$1,310,326
Cotton duck (sq. yds.).....	9,397,216	13,224,129
Cotton duck.....	\$3,518,850	\$4,074,803
Other cotton cloths—		
Unbleached (sq. yds.).....	100,550,444	107,638,662
Unbleached.....	\$10,704,651	\$9,585,236
Bleached (sq. yds.).....	81,970,762	72,901,788
Bleached.....	\$10,495,679	\$8,255,509
Printed (sq. yds.).....	79,866,090	97,114,054
Printed.....	\$11,546,082	\$13,016,927
Piece dyed (sq. yds.).....	86,022,058	100,413,613
Piece dyed.....	\$15,125,494	\$15,811,550
Yarn dyed (sq. yds.).....	69,844,759	76,404,888
Yarn dyed.....	\$11,122,229	\$11,127,900
Cotton yarn, thread, etc.—		
Carded yarn (lbs.).....	12,089,968	14,450,716
Carded yarn.....	\$4,384,188	\$4,605,906
Combed yarn (lbs.).....	7,569,655	8,948,202
Combed yarn.....	\$5,773,540	\$6,845,656
Sewing, crochet, darning and embroidery cotton (lbs.).....	1,172,677	1,112,382
Sewing, crochet, darning and embroidery cotton.....	\$1,193,233	\$1,029,790
Cotton hosiery (doz. pairs).....	4,097,557	3,722,044
Cotton hosiery.....	\$7,302,906	\$6,224,290

Cooking by Electricity on Texas Farms.

Especially interesting in the convincing evidence that the South is developing rapidly is a disclosure of an unusual nature by E. B. Neiswanger, general manager of the Central Power and Light Company of Texas, that "there are probably more electric cooking stoves in use on the farms in the Rio Grande Valley than in any other section of the same area in the United States." Thus the substitution of electric power for muscle power now is helping the Texas housewife, as well as her manfolks on the farm.

Credit for taking electric power first to the farm homes in the Valley is given by Mr. Neiswanger to R. T. Stewart, who wished to sell some farms suited for winter vegetables and citrus fruits, and to make them attractive spent \$5000 to supply electric power to the land, "so there would be electric lights for his purchasers and electric power to turn mills, do the washing, churn butter, pump water for the bath and provide heat for the house and the cooking stove." At first, this current was supplied by small plants in each town, but eventually they were consolidated and were further developed by a single company.

Florida Denies Ever Having Repudiated Any State Bonds.

From time to time, and frequently of late, the charge is made that Florida has repudiated some of its State bonds. In reply to this charge the State treasurer has furnished the MANUFACTURERS RECORD with copy of a statement prepared some months ago in refutation of that charge. The statement follows:

"In recording the retirement of the last bonds to be issued by the State of Florida, it is gratifying to be able to repeat the statement made by Hon. James B. Whitfield, since 1904 a Justice of the Supreme Court of Florida, while serving as State Treasurer, 25 years ago: 'The State of Florida has never repudiated, scaled, readjusted, defaulted or delayed payment of any part of her public debt, either principal or interest.'

In 1871, the legislature authorized the issuance of \$350,000, 7 per cent bonds, and in 1873 an issue of \$925,000, 6 per cent bonds also was authorized. These bonds were redeemed and burned in 1901 and 1903, respectively. Under Chapter 4947, Acts of 1901, \$267,700 3 per cent refunding bonds were issued to the State Educational Funds in payment of the bonds of 1871, which said Funds owned and which matured in 1901. Similarly, \$333,867 3 per cent refunding bonds were taken by the Educational Funds in settlement of the bonds maturing in 1903 and owned by such Funds, and these bonds, aggregating \$601,567, are the ones recently retired.

"It may be interesting to note that \$132,000 of the bonds issued in 1857 by the State of Florida, to aid in the suppression of Indian hostilities, were liquidated in 1902 in the final settlement with the United States Government of the Indian War claims, the State receiving from the Federal Government at that time the sum of \$679,698 over and above the said bonds, with accrued interest, which had been held by the Government during this time.

"During the War between the States, 1861 to 1865, the State of Florida borrowed various sums to aid in the prosecution of the war. Prepayment of these loans was and is expressly prohibited by the Fourteenth Amendment to the Constitution of the United States, which reads, in part, as follows:

"'But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States * * * but all such debts, obligations and claims shall be held illegal and void.'

"It is needless to say that the State cannot be fairly charged with repudiation of any debt, the payment of which is debarred by the Constitution of the United States.

"The State has also been charged with repudiation in connection with bonds issued under Act of the legislature, approved January 28, 1870, in aid of the construction of the Jacksonville, Pensacola, Mobile Railroad Company. It was held by the Supreme Court of Florida in the case of *Holland v. the State of Florida et al.* (15 Fla. 455-549) that these bonds were unconstitutional and void, and the fact was published in the newspapers of New York. No charge of repudiation can fairly lie against the State for failure to pay illegal indebtedness which the highest court of the State held to be in violation of its supreme law.

"The question of whether the State of Florida had, since January 1, 1861, repudiated or defaulted in payment of any part of the principal, or the interest, of any debt authorized by the legislature of said State to be contracted, was passed on in 1914 by Hon. Thomas Carmody, then attorney general of the State of New York, in determining whether or not certain Florida municipal bonds were legal investments for savings banks in New York under the laws of that State. The then attorney general of New York ruled that such

bonds were acceptable investments under the New York law, thereby relieving the State of Florida from the imputation of having defaulted on the principal or interest of any debt contracted since January 1, 1861.

"The State of Florida has been charged unjustly with repudiation of certain bonds issued in 1835 and 1838 and purporting to be obligations of the territory of Florida. The exact amount of these bonds is not available, but they are said to have totaled between \$3,000,000 and \$4,000,000, and were issued for the aid of certain banks and other corporations. It is sufficient to say at this time that the territory of Florida was never authorized by Congress to issue obligations of this nature and, until it was admitted as a State, the territory was under full control of Congress. The State of Florida has never in any way assumed liability for these alleged bonds. On the contrary, the original Constitution of the State, 1838, specifically provided (Article XIII, Section 13): 'The general assembly shall not pledge the faith and credit of the State to raise funds in aid of any corporation whatsoever.' The approval by Congress of this Constitution for the State of Florida clearly shows that Congress did not consider the people of the territory, then being granted statehood, liable either legally or morally for the so-called territorial bonds; otherwise, the Congress would have required the new State to assume the payment of such obligations."

Annual Meeting of American Petroleum Institute.

The eighth annual meeting of the American Petroleum Institute is to be held December 5 to 8 at Hotel Sherman, Chicago. The first session will be given over to various committee gatherings under the following heads: Gas Conservation; Uniform Methods of Oil Accounting; Standardization of Oil Steel Storage and Production Tanks, Specifications for Steel and Iron Pipe, Standard Rigs and Derricks, Bolted Tanks, Wire Rope and Manilla Cordage, Belting, Pumping Equipment and Engines, Rotary Drilling Equipment, Oil Field Boilers, Rig Irons and Cable Tool Joints. Other committees will discuss Petroleum Products and Lubricants; Railroad Transportation; Oil Pollution; Fire Prevention, and Automotive Transportation.

The general meeting will be divided into main groups with main topics such as: Motor Fuel; Standardized Oil Field Equipment; Federal, State and Municipal Taxation; Corrosion of Oil Industry Equipment; Marketing Petroleum Products; Fundamental Research in Petroleum; Federal, State and Municipal Regulation; Oil Accounting; Transportation; Refinery Technology; Development and Production Engineering; Fire Prevention and Safety, and Natural Gasoline.

E. W. Clark is president and R. L. Welch is secretary and counsel for the American Petroleum Institute with headquarters at New York City.

Second Annual Peanut Exposition.

The second annual Eastern Carolina and Tide Water Virginia Peanut Exposition is to be held at Ahoskie, N. C., December 5-9. J. R. Turnage, president of the Eastern Carolina Chamber of Commerce, Kinston, N. C., announces that the purpose in holding this annual peanut show, is "to stimulate interest in the peanut industry and to educate the public to expect more of the industry than just a baseball or circus pastime."

New Houston Plant of Trinity Portland Cement Company Now Operating.

By J. J. HORGAN, Dallas, Texas.

The Trinity Portland Cement Company has recently put into operation its third Texas plant at Houston. The efficient design and mechanical operation of the Fort Worth plant of the Trinity company has been duplicated in the construction and mechanical features, as near as possible, in this new plant, which covers approximately 20 acres of ground practically in the downtown district of Houston on Navigation boulevard—one of the recently completed arteries of traffic. The company has gone to considerable expense in beautifying the grounds through sodding, planting flower beds, building attractive concrete entrances; in addition mechanical appliances have been installed for the practical elimination of all dust.

The plant is wet process and uses shells from Galveston Bay and shale from a point on the San Jacinto River. Shell is purchased on contract delivered at the company's docks. Shale is obtained from property owned by the company and is handled direct from deposit to barges and delivered directly by barge. Shale is handled by a three-quarter yard Northwestern crawler type shovel with three-quarter yard clam shell bucket.

Barges are unloaded by a 25-ton American Hoist and Derrick crane, a crawler-type equipped with a 1½ yard Hayward clamshell bucket. The crane has a 60-foot boom and unloads directly from 300-ton barges to the raw material storage building. This arrangement makes possible the unloading of approximately 2000 tons of raw materials daily. The storage building for shells, shale, gypsum and clinker is a steel and concrete structure 100 by 400 feet. A 12-ton Harnischfeger electric overhead grab bucket crane with 4-yard Hayward bucket handles all materials to bins.

Machinery installation consists of one 11 feet 3 inches by 300 feet Traylor kiln, which feeds into an 8 feet by 80 feet Traylor cooler. One Traylor, 8 by 40 feet, three compartment mill issued for raw grinding, and one Traylor, 8 by 40 feet, three compartment mill is for finish grinding. Each mill is operated by a 900 h.p. General Electric supersynchronous motor, direct connected to mill through flexible couplings. Kiln, compartment mills and cooler were purchased from the Traylor Engineering and Manufacturing Company, Allentown, Pa. The kiln chimney is a tapering reinforced concrete chimney 300 feet high erected by the Heine Chimney Company.

All motors were purchased from the General Electric Company, all transformers from Kuhlman Electric Company, switchboard complete from the Westinghouse Electric and Manufacturing Company; piping, valves, etc., from the Crane Company. Electric power is from the Houston Lighting and Power Company. Gas is used for clinker burning and is purchased from the Houston Natural Gas Company.

O. V. Bartholomew, general superintendent of the company, designed and superintended construction of the plant. The layout and foundations are such that a future daily production of approximately 8,000 barrels can be obtained, but for the present the plant has a capacity of approximately 2,000 barrels daily. The buildings are substantially built, well lighted and ventilated. Considerable Lupton steel sash was used in this construction.

Buildings comprising the plant are one raw material storage, steel and concrete; one kiln building, steel and concrete; one general building, steel and concrete, containing machine shop, stock room, switchboard gallery, other electric power apparatus, air compressors, etc.; one concrete 8-tank silo cement storage with sack house—capacity 150,-

000 barrels; eight concrete slurry tanks; one concrete office building with tile roof, containing Houston general office, plant offices, Houston sales offices and laboratory.

Main offices of the Trinity Portland Cement Company are at Dallas, with plants at Eagle Ford, Texas, 7 miles from Dallas, Ft. Worth and Houston. W. H. L. McCourtie is president of the company; C. E. Ulrickson, vice-president and general manager; O. V. Bartholomew, superintendent; J. J. Horgan, purchasing agent. J. F. Hayden and H. W. Bryan direct cement sales, with H. B. Gillette in charge of Houston sales.

Thriving Commercial Center of Natchitoches.

Natchitoches, the oldest city in the original territory of Louisiana, has the distinction of being an outstanding spot in Louisiana, not only from the historical and scenic viewpoint, but in commercial advantages as well. A. R. Yates, secretary and manager of the Natchitoches Chamber of Commerce, presents in concise form some facts in regard to that section.

Natchitoches is on the main line of the Texas and Pacific Railway and the Jefferson highway, about 300 miles northwest of New Orleans. It has a population of 7000 wide-awake people and Mr. Yates informs us that upon entering Natchitoches at noon you will hear many whistles blowing. One will be the new brick factory recently erected, having an output of 20,000 bricks a day; one will be a large cotton oil mill; another a new laundry and a new bakery, both built this year. In addition, you will see many other enterprises: Four wholesale grocery and produce establishments; lumber plants; ice cream factory; ice and bottling plant; four wholesale oil distributing plants, many commercial houses of all kinds; four banks and finance companies and numerous other enterprises. Natchitoches is the home of the State Normal College, with an enrollment of 1800 students, and also the home of the St. Mary's Academy.

It is a thriving commercial center with annual payrolls of manufacturing and wholesale enterprises amounting to \$500,000, doing an annual business of \$7,000,000 and employing approximately 300 persons. As a location for factories, Natchitoches has an unlimited supply of natural gas, water and power.

Kiwanis Clubs Promote Agriculture.

When representatives of the 30 Kiwanis clubs of Alabama met in annual convention in Mobile this year, they found that one of the most interesting reports was that on agricultural work done by those organizations during the year, as reported by Dr. M. F. Jackson of the Tennessee Coal, Iron and Railroad Company and a member of the Birmingham Kiwanis Club.

Outstanding in the work for the year was: First, establishment of closer co-operative relations between members of the Kiwanis clubs, county agents, other members of the extension service staff of the Alabama Polytechnic Institute and the county and State farm bureaus; second, definite projects in marketing; third, improvement of products for marketing; fourth, popularizing Alabama farm products with Alabama consumers; fifth, boys' and girls' club work.

The Kiwanis leaders realize it must be a permanent project and that they have made only a good start. The Alabama towns in which Kiwanis clubs are located are: Alexander City, Andalusia, Anniston, Athens, Albany, Bessemer, Birmingham, Carbon Hill, Cullman, Cordova, Demopolis, Ensley, Eufaula, Eutaw, Fairfield, Florence, Gadsden, Huntsville, Jasper, Leeds, Mobile, Montgomery, Opelika, Ozark, Selma, Sheffield, Talladega, Tuscaloosa, Tuscumbia and Winfield.

The Industrial Survey an Invaluable Feature.

By CHARLES C. ROCKENBACK, Industrial Commissioner, St. Louis Southwestern Railway Lines.

[For years the Manufacturers Record has ceaselessly preached the importance of thorough industrial surveys by railroads, counties, cities and states. Wherever this has been intelligently done, the expense has been triflingly small, compared with the good results accomplished. A wise expenditure for work of this kind is necessary in these days of keen competition for the location of new industries or the enlargement of existing plants. Billions of dollars of latent and, for the time being, worthless wealth is stored beneath the soil of the South and in the opportunities offered by this section, but is of no value to the owners or to the country at large until touched by the magic wand of scientific research and the investment of capital. Some railroads have been doing extremely intelligent work in the form of industrial surveys, and find the results more than profitable. The following is an extremely interesting story of the importance of industrial surveys to railroad and other interests. In this article, C. C. Rockenback, industrial commissioner of the St. Louis Southwestern Railway Company, gives some facts as to the importance of industrial surveys which should appeal mightily to all the business interests of the country.—Editor Manufacturers Record.]

The Industrial Survey as a medium for the development of the communities and territory tributary to a railroad is assuming greater importance each year, with the realization of the relationship of the prosperity and well-being of these communities to the general prosperity of a railroad. A comparatively few years ago railroads were dependent solely for the development of the territory traversed by them upon the activities of the inhabitants, which at its best was a slow process. With wider activities on the part of the inhabitants, due in a measure to natural increase in population and wealth, and a better knowledge of the resources of this vast area, the Southwest has been gradually surging into its proper place in the industrial world.

To appreciate the importance of an industrial survey, it should be considered that, although the territory tributary to a railroad may contain immense natural resources, unless the railroad has knowledge of the fact, the resources may just as well not exist. Likewise, although a railroad may know of the existence of the resources, unless it makes this fact known to the consuming industries this knowledge is of absolutely no avail. These are fundamental facts, the principles of which are adhered to in every business and should likewise be observed in the business of industrial development.

An industrial survey should, therefore, have as its object the determination of the location and extent of all undeveloped resources and, having acquired this knowledge, the railroad should convey it to the consuming industries through the medium of an advertising campaign, direct solicitation or any other appropriate method.

While the foregoing should be the predominating object in the compilation of data for the preparation of an industrial survey, numerous other vital features enter into consideration, such as the availability and adaptability of labor necessary for the operation of an industrial plant in the development of the resources; water, power and fuel supply; proximity of transportation facilities, advantages or disadvantages of the proposed industrial plant in its location to consuming markets as compared with existing plants engaged in the same pursuit; the saving in production costs when compared with some other locality in which competitors are operating, and the local market which would be created by the establishment of a plant at a particular point by excluding the products of competitors. In addition to answering these questions, which are of the utmost importance to a prospective enterprise, an industrial survey should be a vivid portrayal of a community, indicate its size, activities, social, labor and economic conditions, form of government, rate of taxes and numerous other details which will be a determining factor in indicating actual conditions.

The compilation of data for the preparation of a survey of this character is now under way by the industrial department of the St. Louis Southwestern Railway Lines. It is known that the territory traversed by this company offers immense resources in timber and clay suitable for manufacturing purposes; lignite adaptable for fuel, and which under processes

recently perfected can be liquefied for the production of numerous valuable by-products; sand and gravel deposits, ore deposits, limestone deposits, fuller's earth deposits and other natural resources. The extent of all these natural resources will be thoroughly investigated and their location charted. An average specimen of each of the deposits will be analyzed by competent chemical and metallurgical engineers to determine the purpose for which it is adaptable, and the results recorded. This survey also will determine the extent and diversity of agricultural resources as well as dairy products, and propound the advisability of soliciting the establishment of canneries and creameries.

Significant of the arrival of an unprecedented era in the industrial development of the vast territory served by the St. Louis Southwestern Railway Lines is the selection of a point on its rails by an Eastern concern for the establishment of the largest kraft paper mill in the South. If the manufacturing of newsprint paper from Southern pine and gum materializes through the recent perfection of a new process by Eastern chemical engineers, it will hasten the industrial growth of this area. The trend of manufacturing industries utilizing timber for their raw material to establish their plants in this territory has been manifest for several years, but was most strongly accentuated several months ago when an automobile body plant, a furniture factory and several other woodworking industries selected points on the rails of this company for the location of their plants.

There are numerous and weighty reasons for the trend on the part of manufacturing industries utilizing timber for raw material to establish their plants at the source of supply, and these reasons apply as well to the textile industry and every industry having its source of supply of raw material in this territory. While, a comparatively few years ago, this territory offered limited facilities and inducements to manufacturing industries, time and activity have wrought a stupendous change. Every known facility inspired by both necessity and convenience is now found in this territory. Add to this the natural gift of a marvelous climate, settled economic and labor conditions, and one has a field for industrial activity which cannot be surpassed by any other section of the United States.

The industrial survey undertaken by this company will have as its object the determination of the extent and location of all natural resources tributary to its rails, the proportion of these natural resources which are being developed and the compilation of data pertaining to all undeveloped resources with a view to interesting operators. It will also make available to industries contemplating locating in this territory all pertinent data pertaining to every community along the rails of this company, as well as business openings and opportunities. The industrial requirements and capabilities of each of the communities will also be developed and, with the support and assistance of the citizens of these communities, the industrial department will make an organized and determined effort to satisfy their requirements.

Torque Converter May Revolutionize Automobile Construction.

Actual, practical operation of a device for automobiles by which gear shifts are entirely eliminated and by which the speed is regulated solely through pressure on the accelerator pedal is announced in a letter to the MANUFACTURERS RECORD from Arthur Kitson, a director in Engine Power, Ltd., 7 Grosvenor Gardens, London, England, and is described in an article by George Constantinesco, the inventor, in the Journal of the Royal Society of Arts. Of the Torque Converter, as the new device is called, Mr. Kitson in his letter says in part:

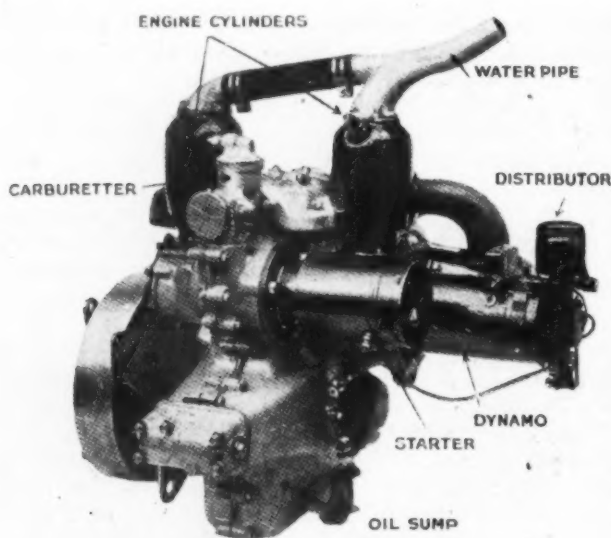
"It displaces gearing entirely, providing an infinitely variable speed mechanism without the aid of either hydrau-

with teeth for the starter pinion to engage." The magazine "Motor" gives this description:

"The engine and converter unit consist essentially of an aluminum casing divided down the center and carrying a cylinder and one set of engine parts at each side. The cranks drive a primary shaft and the inertia weights used in this transmission system. The weights in turn operate a secondary shaft through the medium of uni-directional mechanism which have been aptly termed mechanical valves, and these cause a secondary shaft to rotate continuously in one direction. This secondary shaft is coupled to the propeller shaft for the car.

"The simplest way of explaining the action of the torque converter is to use the analogy of a stick with a heavy knob swung between the hands. The simple torque converter mechanism embodies a primary shaft, driving a pendulum through the medium of a crank and connecting rod. The pendulum is swung from a link, the intermediate joint being coupled by rods to mechanical valves mounted on the secondary shaft. To and fro motions of the intermediate joint are converted by the valves into a continuous rotation of the secondary shaft."

In other words, if a stick be held by the left hand and swung slowly by the right hand, there is little tendency to move the left hand from side to side—this "corresponds with the condition in the car when the engine is ticking over and the pendulum simply swings without conveying any motion to the secondary shaft." If the engine be speeded up, it corresponds with increasing rapidity with which the right hand is trying to move the stick to and fro, in which the left hand is forced to move from side to side to a certain extent,



TWO-CYLINDER FIVE-HORSEPOWER CONSTANTINESCO MOTOR WHICH REQUIRES NO CLUTCH OR GEARS TO TRANSMIT POWER.

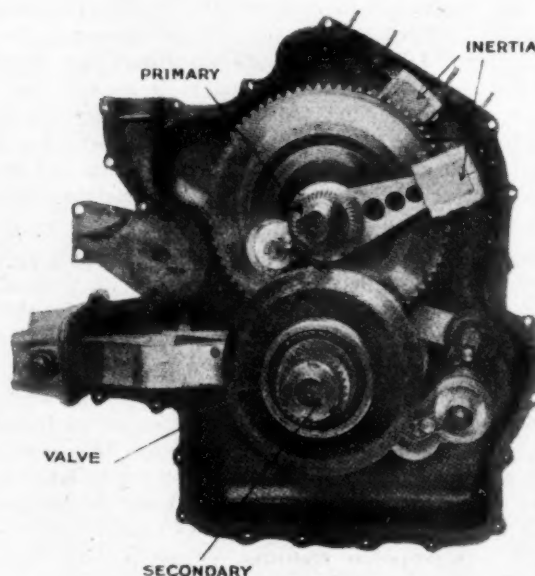
lics or electricity. It has already been applied to motor cars and to a locomotive. Mr. Constantinesco and I drive one of these cars almost daily.

"The effects of the Torque Converter are almost uncanny in their automatic response to the difficulties presented by the roads. For instance, in climbing a hill, the engine automatically speeds up and the greater the incline the greater the speed of the engine until reaching the top of the hill, when the engine automatically slackens to its normal speed. The driver of one of Constantinesco's cars has nothing to do but press the accelerator pedal and attend to the steering. One can stop on the middle of the steepest hill with this car, without danger of the car running down hill, even without the brakes being applied.

"A further result of the use of the Torque Converter is that a much smaller engine can be used than is ordinarily employed in cars using the ordinary gear box. For example, one of the cars we drive is fitted with a 5-horsepower engine, with which we are able to get the same speed and climb the same hills as we could with a 12-horsepower engine fitted with a gear box. This serves to reduce the amount of petrol consumed and also the annual tax, which in this country is rated at £1 per horsepower.

"The applications of the Torque Converter are innumerable. It can be applied to steamships, propellers, lathes, planing machines, buses and even to push-bikes. A well known engineer recently stated that the Constantinesco Converter will replace all other forms of power transmission in the next 20 years, just as the automobile has superseded horse vehicles."

In describing a demonstration car equipped with two-cylindered two-cycle engine, "The Commercial Motor," in an article on the subject, says that the crankshaft is of unusual length and the cylinders are farther apart than usual. In the center of the crankshaft is a flywheel, which is provided



INTERNAL ARRANGEMENT OF FIVE-HORSEPOWER CONSTANTINESCO CONVERTER-MOTOR UNIT.

although the knob is swinging also—corresponding with the rapid movement of the primary shaft and slow movement of the secondary shaft, which might be called a low gear condition. Finally, says Motor, "if the resistance of the left hand be decreased and the movement of the right hand be speeded still further, the heavy knob of the stick will remain practically stationary, and in the case of the car this corresponds to a top-gear condition."

An outstanding characteristic of the car is the entire absence of gear changing or clutch manipulation. To start, with the engine running, one simply accelerates the engine, and at 1200 r. p. m. the car gets away smoothly and progressively. The pickup is very quick, because, as the speed of the car increases, the gear ratio—if it may be called such

in a car that has no gear box—is automatically raised by the torque, so that the engine revolutions gradually decrease; in other words, as "Motor" says, "instead of accelerating to the sound of a rising engine note, one finds that just the reverse is the case."

Provision, of course, is made for both forward and backward movements, through simple pull of either a forward or a reverse lever.

Naval Stores Production Increases.

New Orleans, November 26—[Special.]—This year's production of naval stores is estimated at about 30 per cent above the previous season. Production last year was 510,000 barrels of turpentine, which at an average of \$40 a barrel brought \$20,400,000, and 1,600,000 barrels of rosin (280 pounds), which at an average of \$20 brought \$32,000,000; total, \$52,400,000. This year's turpentine production will be about 650,000 barrels, which at an average of \$20 a barrel means a value of \$13,000,000, and 2,000,000 barrels of rosin, which at an average of \$6.75 means a value of \$13,500,000; total, \$26,500,000.

Last season 32,000,000 new cups were bought and hung, the previous record having been 21,000,000 cups and the average having been about 15,000,000. This forced production was brought about by the good prices of last year. There are only about 1400 gum producers and 5 wood producers in the turpentine industry, considered a very small number. The fact that it has not been possible to unite these few into profitable effort, despite the depressions that have followed heavy production in the past, is considered an indication that the industry has not put itself upon a modern basis. Sixty-five per cent of the world's output of turpentine and rosin comes from the Southern States. The foreign demand up to the fall of the present year has been heavy. Still prices dropped. One of the principal users of turpentine is the paint and varnish industry. One of the principal users of rosin is the soap industry.

The problem of the naval stores industry in the words of Carl Speh, secretary-manager of the Pine Institute of America, Jacksonville, "is not one of overproduction, but of under-consumption." He adds: "It is no problem to sell 1,000,000 barrels of turpentine and 4,000,000 barrels of rosin; the problem lies in selling them at profitable prices."

The Pine Institute has been organized to meet this situation and is working along two principal lines: First, to improve the methods of production and work out economies of manufacture; second, it is planning a national educational campaign, through advertising, to sell the nation on quality merchandise, so that consumers will demand goods in which turpentine and rosin are used, instead of substitutes. The Institute is carrying on extensive chemical research at the Mellon Institute and, says Mr. Speh, "the experiments already show remarkable results."

At present prices the naval stores producers are getting considerably less than the cost of cropping and manufacture. Last year's prices were profitable, but by no means excessive. From present indications, next year's crop will be cut considerably.

Medical Arts Building for Waco, Texas.

Waco, Texas.—A company is being organized here to promote the erection of a 12-story Medical Arts Building. Among the directors will be: E. R. Nash, William C. Abeel, John Dockery, G. Stratton, R. J. Potts, F. M. Compton, Albert T. Clifton, I. W. Jenkins and A. M. Goldstein. Just as soon as arrangements are completed for financing the structure an architect will be selected.

Alabama Cannery Are Optimistic.

By P. O. DAVIS, Auburn, Ala.

The canning industry is taking on new life in Alabama, the stimulus being due to a satisfactory market for Alabama canned products. In large measure this revival of interest is due to a movement launched two years ago by big industrial concerns of Birmingham to increase the consumption of Alabama farm products of all kinds. The Tennessee Coal, Iron and Railroad Company has been outstanding in this movement, but many other of the big corporations doing business in the State also have been strong in their support.

An exhibit of Alabama food products was displayed at the Birmingham State fair and again at the Montgomery State fair. It included products from six canning plants, ten creameries, two manufacturers of pickles, two of preserves and three packing houses. Canned products on display were beans, okra, tomatoes, sweet potatoes, blackberries, green peas, peaches, beets, peppers and various combinations of two or more of these products. Each was labeled neatly, and attractive brands were used. The Abbeville Foods Products Corporation, Abbeville, had 11 of its "Sunlight" products in the collection and King Pharr of Catherine had 9. Of special interest was the exhibit of fig preserves, an Alabama product which promises unlimited development, while Brunswick stew, peanut butter, strawberry jelly, mayonnaise, vinegar and honey also were included.

The booth as arranged by the Tennessee Coal, Iron and Railroad Company was one of the most attractive at each of the fairs. In the front were the products; to the rear was a big map of Alabama with a ribbon leading from the product to the point on the map where it was made. Visitors were handed a printed statement reading:

"Some time ago the Tennessee Coal, Iron and Railroad Company, realizing it was good business for the industrial district to consume Alabama agricultural products, set out to find dependable sources of supply of satisfactory products and encourage the marketing of such products through established trade channels, in order that the industrial companies of the State might more easily procure them, and that the quality might be standardized. As a result of this effort and the work of the agricultural extension service at Auburn and the Alabama farm bureau, there are now being consumed in the Birmingham district large quantities of Alabama food. Alabama hay also is being given preference in Birmingham.

"The purchasing agents of other industrial companies in the Birmingham district have joined with the Tennessee Coal, Iron and Railroad Company in the purchase of Alabama food products for their employees, with the hope that Alabama farmers might find a more ready and profitable market for their surplus milk, cream, eggs, beef cattle, hogs, lambs, poultry, vegetables and fruits; therefore, the farmers of the State will be interested in knowing where large quantities of these products may be sold and the consumers should be interested in knowing where they may be procured."

Several years ago attempts to establish small canneries in Alabama resulted in failure. With big consumers of the State now specifying Alabama products, experts believe that small canneries, properly managed, should succeed.

Develop 7000 Acres of Lignite Land in Texas.

According to Bryan Blalock, secretary of the Chamber of Commerce, Marshall, Texas., 7000 acres of lignite land in that vicinity will be developed by the Texas Natural Resource Corporation of New York city. Directors of the company include: Charles Tisch, director of the Lafayette National Bank of Brooklyn, N. Y.; John A. Kienle, vice-president of the Mathieson Alkali Works; Edward A. Green, president of the Citizens Title Insurance Mortgage Company; Harry W. Barley, president of F. R. Cruikshank Company; John Calvin McKnight; William Green, and Walter Clifford, all of New York.

The Growth of Abilene Typical of West Texas.

By J. C. WATSON, Abilene, Texas.

The year 1881 marks the beginning for West Texas, and despite the short time that has passed since civilization started its work in that great area, gigantic strides have been made. Probably no better way can be found of presenting a mental picture of the changes that have come to West Texas than by taking a survey of the development of Abilene, a city whose citizens have dubbed it "The Capital of West Texas," because it is the largest city in that district and is regarded as the educational, cultural, commercial and industrial center of the area.

Until 1870 all the area embraced in West Texas had been left pretty well to the Indians, but gradually the frontier line was advanced, and the city of San Angelo now stands on the site of one of the last outposts. And then the railroad

tion for many. They were business men. The new towns were plotted and advertised. Then came the openings.

On March 16, 1881, the town of Abilene had its official introduction to the world, located 177 miles west of Fort Worth, then the farthest west town of any consequence in the northwest part of the State. Texarkana was 407 miles to the east and to reach El Paso the railroad surveyors had traveled 457 miles westward from the stake at Milepost 407, the designation given the new town prior to the selection of a permanent name. Other towns were established along the railroad and each of them attracted numbers of citizens.

To quote an early arrival in Abilene, "The part of Texas briefed by Abilene enjoys a climate without monotony, its winters softened by sunshine, its summers made pleasant by never resting breezes; a soil rich and easily put in cultivation and cheaply tilled and a reasonable rainfall which is less damaging than the greater downpours elsewhere."

So Abilene's pioneer citizens fostered and encouraged immigration of farmers, cattlemen and people in all occupations and professions and these efforts to colonize West Texas were given instant and interesting responses. Taylor county, of which Abilene is the seat, when organized in 1878, had a population slightly in excess of 300 people. It had increased at the time of the Government census of 1880 to 1736 and the enumeration for the county in 1890 showed 6957 people. There were in 1920 a total of 24,270 inhabitants in the county and in 1925 they numbered 41,985. Estimates on the county's population for 1927 place the figure at approximately 50,000 and increases in population have been made by all West Texas counties, practically in the same proportion as that shown by Taylor county. According to a recent survey, the population of the territory embraced within a circle with a radius of 75 miles, of which Abilene would be the center, is at present 451,398. In 1880 the same counties had 32,244 inhabitants. The territory within that circle lying west of a line drawn from north to south along the east line of Taylor county and intersecting the circumference of the circle in 1880 had 2962 inhabitants; today there are 241,320 people living in that same territory.

Abilene today is a city of over 30,000 souls and represents in its growth the steady development of the tributary area along permanent, substantial lines. The population of this



MIMS BUILDING, NOW UNDER CONSTRUCTION.

came. Not with the idea of developing West Texas, but to provide a route for overland traffic to California by way of El Paso, the Texas and Pacific Railway came out across West Texas. At intervals along the railroad new towns were established by promoters who were more or less connected with the concern building the transportation system. Those folks knew human nature. They realized that the new country, although unsettled and unproved, would hold an attrac-



A VIEW OF PINE STREET.

city in 1900 was 3411; in 1910, 9204. West Texas has changed in character in just as great measure as in population.

Even at the beginning the need for educational institutions of a high grade was felt in Abilene and the city has encouraged and assisted in the establishment and maintenance of such institutions. There are now in Abilene one university, the only one in West Texas, two senior grade colleges, one parochial academy, two business colleges and a well-organized public school system.

As the territory about Abilene developed and the retailers



RECENTLY COMPLETED \$1,000,000 HILTON HOTEL.

of the smaller towns came to need sources of merchandise supply easily accessible, Abilene led the way and distributing houses were established. During the 12 months of 1926 Abilene wholesale and jobbing establishments handled 14,000 carloads of groceries and one hardware jobber distributed 400 carloads of merchandise from one house in Abilene. Many other lines are handled by the 86 wholesale plants of the city and still others are warehoused and shipped out to merchants in the surrounding regions.

Manufacturing has been taken up in West Texas and in Abilene and one of the largest cottonseed products plants in the South is located here. Other establishments make poultry, dairy and livestock feeds; creamery products, confections, clothing, brick, brooms, office supplies, mattresses and food products. The general office and central power plant of a \$26,000,000 public service company which serves 100 West Texas communities with electric power and light, natural gas and ice are located here. That concern now has 1500 miles of transmission lines over 36 counties and there is hardly a hamlet of a dozen homes not now served by those necessities.

It is the agricultural activity in West Texas that employs the majority of the people and produces the bulk of its wealth; but it is not the only one. Development of the mineral resources has added greatly to the prosperity of the county. Underground supplies of petroleum have been tapped and new sources of commodity are being found. Also, large deposits of gypsum are being mined and made into commercial

products. There are valuable coal beds and large amounts of building stone and clay and many of them are being extensively exploited, but the end is not in sight. The surface only has been scratched.

Constructive Program for Mississippi.

Jackson, Miss., November 26—[Special.]—An ambitious assortment of objectives was outlined in the program for the coming year by directors of the Mississippi State Board of Development, at their recent meeting, the schedule calling for renewed vigor in reforestation, agriculture and animal husbandry, public health, rivers and harbors, education and industrial development. Appropriate sub-committees were appointed, headed by a rivers and harbors committee and an industrial committee, the former led by R. L. Simpson of Gulfport and the latter by R. E. Kennington of Jackson.

The State's outlook for greater industrial development was stressed in particularly by Barney Eton, head of the Mississippi Power Company, Gulfport, who pointed out that power development "will hasten the tide of industry now turning to the South." The paper industry, he opined, is looking to the South, and "the tendency now is, as never before, to get nearer source of supply, and there is in Mississippi sufficient regrowth of timber to assure continuous operation for these plants."

Mr. Eaton cited an editorial in a recent issue of the MANUFACTURERS RECORD to show the interest by New England cotton mill operators in the South, this editorial telling of one New England manufacturer who abandoned his plant in Massachusetts, "because of the unfair and unjust attitude of the State," and turned to North Carolina. "The power possibilities for Mississippi and surrounding States have hardly been touched," Mr. Eaton declared, "and another great asset, availability of labor, still is virtually untapped."

Mr. Simpson's sub-committee will survey port conditions on the Gulf coast and the Mississippi River, to prepare for a campaign to induce Mississippians to indicate shipments of all commodities that can be routed in that way to the Gulf coast.

Closer co-ordination among the various groups identified with agriculture in the State is to be sought under a policy agreed upon by the directors. This calls for closer contact with the board by the agricultural schools, the farm bureau, the farm experiment stations, extension forces, etc. Mrs. Robert Ralston, Coahoma, the only woman director, outlined a proposal for the various development organizations in the State to affiliate with the State Board of Development, pointing out that these organizations were doing on a restricted scale the work achieved by the board on a State-wide scale.

President L. O. Crosby in declaring that the function of the organization is to educate and demonstrate, said: "We have been markedly successful. After the hardest political campaign this State ever witnessed, the people have responded wonderfully to our appeal to forget factionalism. Politics already has been abandoned by leaders and the rank and file, when the new legislature convenes, it will face its problems with an open mind, ready for the greatest good to be done for the State."

Tribute was paid by the directors to the work of General Manager L. J. Folse, and the following sub-committee chairmen were appointed: Agriculture and animal husbandry, C. L. Neill, president of the Mississippi Farm Bureau; reforestation, J. B. Bishop, Pinola; finance, S. S. Marks, Jackson; rivers and harbors, R. L. Simpson, Gulfport; industrial, R. E. Kennington, Jackson; legislative, Judge J. H. Price, Magnolia; public health, Dr. O. J. Segura, Jackson.

A North Mississippi meeting of the Development Board will be held soon, under a plan outlined by Judge D. H. Houston, director, Aberdeen, with General Manager Folse in charge.

Mining for Petroleum Claimed to Be a Feasible Method of Ultimate Recovery in Future.

Ponca City, Okla., November 26—[Special.]—Ultimate recovery of petroleum in the pools now being drilled and heretofore drilled throughout the country will be by mining, according to opinions expressed by petroleum engineers and scientists during the conservation conference held here recently under the auspices of the American Petroleum Institute. It developed that even now special care is being taken with regard to present recovery methods in order that the sands and their petroleum product will not be damaged for mining later. This fact developed particularly in regard to present methods of forcing natural gas, air or water back into a pool in order to repressure it and thus produce more oil now.

While mining oil in Oklahoma and elsewhere in America is not anticipated to occur at any near date along any extensive lines it is learned authoritatively that old oil-field leases in the more Eastern Oklahoma fields are being bought up by major companies in order to mine for oil similar to work that is now being done successfully in oil fields in France and elsewhere abroad. The leases thus being secured are those where oil was secured at a shallow depth and which are now about played out or entirely so in some instances.

The plan is to sink shafts, similar to coal or other mineral shafts, which will go through the bearing oil sand and far enough underneath to permit side shafts to be tunneled in directions from the main shaft that follows the oil vein. Pipes are then driven upward to penetrate the sand, and through these the petroleum flows to the tunnels beneath. In this connection, it is held by oil companies generally that only a small portion of oil is secured through the present methods of drilling, and frequently it is held that only 16 per cent of the oil is secured. Mining the oil in the above manner is expected to secure an additional big supply of the oil, if not all of it.

The best-known oil-mining enterprises at the present time, according to Edward Bloesch of Tulsa, petroleum engineer, include oil tunnels of Sulphur Mountain, California, and the oil mines of Pechelbronn in Alsace and of Wietze in Germany. These have been visited personally by Mr. Bloesch, and he explains that tunnels have been driven into the side of Sulphur Mountain in California to penetrate the oil sands and a smaller tunnel is also in operation near the Utah line in Colorado. In Alsace and Germany, and also near Geneva in Switzerland, tunnels and shafts are used. Mr. Bloesch says:

"Oil mining should only be undertaken where sufficient oil to pay for a large investment can reasonably be expected. It is very important to know the gasoline content of the oil and the gas and water contents of the sand in order to decide whether the mining operations can be carried on in the sand or if the galleries shall be driven outside of the oil-bearing stratum. The depth should not be excessive. While the Pechelbronn mines are only 150 to 250 meters (500 to 800 feet deep), depths of 2000 or even 3000 feet may not be prohibitive. Inasmuch as oil mining is still more or less in the experimental stage, shallower fields should be mined first, because initial expenses, especially for the shafts, increase with depth.

"Of prime importance also is the size of the field or pool. If the area is too small, the sinking of a shaft does not pay. Because of the need for ventilation and as a safety measure, two shafts are preferable to one. In some countries two shafts are specified by the mining laws; but, of course, a shaft of large diameter could be divided into two sections, which with proper insulation would be nearly as good as two separate shafts. Two shafts are sufficient for a field of several square miles, which is an area much in excess of the average oil property in the United States. Therefore, owners of leases in a common pool ought to get together and operate a mine jointly.

"Information about the rocks through which the shafts

must be sunk, and about the oil sand, can be obtained from old wells, providing proper records have been kept. Usually, it will be necessary to drill a number of core drill holes to get the necessary information. It is important that abandoned holes have been properly plugged or are in a shape to be plugged; otherwise they may cause trouble. Plugging of abandoned wells and dry holes is compulsory in most places, but often the plugging laws have not been properly enforced. In old fields even the location of some of the holes is unknown. Some old wells could be used for ventilation, for pumping oil out of the mine or for conveying compressed air or steam to the workings.

"Present oil and mining laws devised for other purposes may be harmful to oil mining, or at least may not give it sufficient protection. However, most Government agencies are awake to the importance not only of developing, but also of conserving the oil resources. As oil mining is conservation in the highest sense of the word, the Government will certainly encourage it.

"As far as ultimate recovery is concerned, draining oil sands by mining methods is a great step forward and leads to the final step; namely, mining of the oil rock and extracting the oil.

"Economically oil mining is a success, at least in fields which are best suited for this method. Working underground in or near the oil-bearing rocks will furnish geologists much new information about origin and migration of oil, and it is to be hoped that observations by competent men are carefully recorded and published for the benefit of science and the oil industry."

\$1,000,000 Medical Arts Building Sub-Contracts Let.

The Gilsonite Construction Company of Dallas, Texas, general contractor for a \$1,000,000 Medical Arts Building under construction at Amarillo, Texas, for the Fisk Investment Company, advises that the brick work has been completed and a portion of the building is practically ready for occupancy. The structure is 10 stories, 60x140 feet, of reinforced concrete, steel, face brick and terra cotta. Guy A. Carlander of Amarillo is the architect. The following contracts have been awarded:

Reinforced concrete—The Brennan Company, Amarillo.
Terra cotta—Denver branch of the Northwestern Terra Cotta Company, Chicago.
Miscellaneous and ornamental iron—Weaver Ornamental Iron Works, Dallas, Texas.
Fireproof windows—Samuel A. Ellsberry Company, Dallas.
Millwork—Schulze Brothers Manufacturing Company, San Antonio, Texas.
Marble work—Bond Tile and Marble Company, Tulsa, Okla.
Mail chute—Cutler Mail Chute Company, Buffalo, N. Y.
Plumbing and heating—Cullyford Plumbing and Heating Company, Amarillo.
Electric work—American Automatic Appliance Company, Amarillo.
Elevators—Dallas office of Otis Elevator Company, New York.
Gypsum and tile partitions—United States Gypsum Company, Chicago.
Sheet metal—Reed Sheet Metal Company, Amarillo.
Glass and glazing—Dallas office of Pittsburgh Plate Glass Company, Pittsburgh, Pa.
Weatherstripping and caulking—Harry Hardgrave, Amarillo.
Plastering—Ralph L. Stowell, Amarillo.
Roofing—Lydick Roofing Company, Amarillo.
Terrazzo floors—Southern Tile Company, Dallas.
Brick—Acme Brick Company, Dallas.

\$2,000,000 Alabama Seaport Bonds to Be Sold.

Mobile, Ala.—The Alabama State Docks Commission has recommended to Governor Bibb Graves the sale of an additional \$2,000,000 State seaport bonds on December 15. This will increase the total bonds placed on the market to \$9,000,000, leaving \$1,000,000 of the authorized issue unsold.

\$1,000,000 Corporation Organized in Florida Outlines Farm Relief Plans Under Which It Will Operate.

The fundamental financial problem of our country is the stabilization of the farm. No problem offers greater awards for a solution, no problem is more vexatious. That a solution is imperative is universally acknowledged; the country requires the produce of the farm for its subsistence and the country needs the farmer as a customer for its vast industrial enterprises.

Basically it would seem that the solution of the farmer's difficulties rests in putting farm operations on a business basis; putting the farmer in such position that he can adopt the economies and methods of industry. There is one factor that cannot be controlled; namely, the quantity of production, dependent as it is on the elements. That will always remain the farmer's gamble; but canning plants, properly located, can provide protection in this gamble.

Florida, more particularly the southern part, is a subtropical country, and the Florida farmer's problems differ from those in the North in that he does not produce crops which can be carried over. Southern Florida's principal agricultural crops are citrus fruits—oranges, grapefruit, tangerines—potatoes both white and sweet, celery, strawberries, melons, tomatoes, peppers, eggplant, beans, all products which require immediate disposition. Vegetables are brought to market at a time when other producing lands in this country are not in competition. There are vast tracts of undeveloped land suitable for cultivation. Florida, with proper development, can be the truck garden for the nation. It is possible to raise three crops a year; beans may be planted in September, white potatoes in November, tomatoes in March, and after the tomatoes are picked a cover crop may be planted to enrich the soil before the next planting.

To farm successfully in Florida there are certain necessities: good soil, proper drainage, means of irrigation, knowledge of the peculiar problems to be met, proper equipment, a dependable method of financing seed and fertilizer, a concentration of effort—these to make a crop. To dispose of the crop to advantage a stable method of marketing must be available. The farmer must have easy access to a packing house where his produce can be attractively prepared for shipment and then he requires the efforts of a market specialist.

With these needs in mind R. N. Koblegard reports that the South Florida Products Corporation, Fort Pierce, has been organized with authorized capital stock of \$1,000,000, all of one issue. Mr. Koblegard, who is the organizer of the company, has been connected with the development of St. Lucie county for more than twenty years and is president of the National Fruit Product Company, Inc., of Washington, D. C., which he says is the largest producer of cider vinegar in the world.

"The plans of the South Florida Products Corporation," according to Mr. Koblegard, "include the acquisition and continued operations of present producing groves and farms and also of a modern packing house for which stable market connections have been established.

"The corporation will own two groves and will operate the largest vegetable producing unit in St. Lucie county. There are now many acres planted in white potatoes, destined to be an important vegetable crop in this section. This farm, which was raw, uncleared land in August, 1925, is completely equipped. It has 10 acres devoted to pedigreed poultry with ample room for expansion. There are extensive seed beds preparing for crops to follow the potatoes. In addition, the

corporation will control several thousand acres of drained land for cultivation.

"A feature in the proposed operations is the method by which farmers are to be put on the land. The average man coming to Florida to farm," says Mr. Koblegard, "has not sufficient capital to buy his land outright, to erect a modern home, to purchase modern machinery and equipment, to buy seed and fertilizer, nor has he the special practical knowledge to secure the greatest yield. Such knowledge has to be acquired in the hard school of experience. Florida's soil is fertile but the working of it is different from Northern farming.

"The South Florida Products Corporation proposes to clear fifty 20-acre farms, erect on each a modern home and suitable outbuildings, drill an artesian well and equip with adequate tools. It proposes to settle on each farm a famillied man of ability and to furnish him with necessary seed, fertilizer and supplies. The farms will not be sold at the outset. The farmer will be able to test it on a profit-shraing basis for one or more years and then, if he wishes to acquire the property, it will be sold to him on easy terms. The entire purchasing power of the corporation will be at his disposal with resultant substantial savings. Financially, therefore, every farmer will have every advantage the capital of the corporation can furnish.

"The corporation will have expert practical farmers not only to operate its own producing lands but to give practical advice and supervision to the new farmers. These supervisors will be men skilled and experienced in raising, under Florida conditions, potatoes, tomatoes, celery, strawberries, melons, lettuce, cucumbers, eggplant and the others of the vast array of vegetables which can be grown successfully.

"The corporation will conduct a school of agriculture which the farmer will attend at least once a week. There he will be instructed in the latest tested ideas and discoveries in modern farming. The supervisors will also make frequent visits to every farm to give detailed advice on the ground. The new farmer will thus be enabled to avoid the pitfalls which snare the inexperienced man.

"There are certain items of equipment, trucks, tractors, and so on which every farmer will need but which he will not need continuously. The corporation will have its own transportation department with a fleet of trucks; it will maintain a sufficient number of tractors with plows, harrows, etc., and these will be available to the individual farmer as he requires their use.

"Having produced a crop, the farmer's next need is a market. The corporation will maintain its own packing house with its own brands and will maintain its own selling organization. This packing house, thoroughly and modernly equipped, has been successfully and profitably operated. It has ample storage facilities. These facilities will be available not only for the produce grown directly by the corporation or by its new farmers but also to other growers in the section. The corporation's selling organization has established market connections for the outright sale of its shipments in carloads, thus eliminating express, warehouse and commission charges.

"Every farmer in the operation will be required to ship his produce through the corporation's plant. There it will be properly graded and packed, only the choicest produce being shipped. The corporation has established connections to whom bona fide sales will be made with the elimination of

the gamble of consignment. Shipments will be made in carloads with a vast saving in transportation charges. The corporation has established connections in the smaller markets for outright sales of mixed carloads of fruits and vegetables, giving these markets the benefit of lower transportation costs with the elimination of warehouse and commission charges. Prices in these markets will be lowered to the level of the larger markets with an increased return to the farmer.

"There will be completed in Fort Pierce within the next year an inlet and harbor with dockage to accommodate the largest coastwise steamers. To large markets additional savings over rail rates, it is expected, will be accompanied by lowered railroad tariffs to compete with the water transport. As a result there ought to be further savings in transportation costs both on incoming and outgoing shipments.

"In packing for shipment only the choicest fruits and vegetables will be utilized, the corporation culling out produce adaptable to canning and preserving. This produce will be not inferior in its edible qualities but will be rejected for size, irregularities in shape, surface blemishes which detract from attractive appearance. The farmer will thus obtain returns for produce not having the highest marketable qualities and also for any surplus giving an outlet for his entire crop.

"The corporation will erect and equip a modern canning and preserving plant which will be placed under the control of an experienced food chemist. The operation of this plant will check wastage in fruits and vegetables.

"The plan, therefore, will be a co-operative movement between capital and the farmer. Capital will furnish the farmer with all the requisities at the lowest possible cost, will enable him to share in the advantage of its purchasing power, will direct his endeavors with proper efficient management and will provide him with a market wherein the farmer will secure the highest returns. The farmer will be able to devote his efforts to the crops without financial worry, on a farm not too large for his individual attention. He will be living in an unexcelled climate and he and his family can enjoy outdoor life the year round.

"The farmer will run his farm as the business man conducts his business. The burdens and evils, which are the basis for all farm relief agitation, will be eliminated. The resources of the corporation will insure the success of this plan which we submit as practical farm relief."

Georgia Power Year Book.

The Georgia Power Company's new year book for 1927 and 1928 is a well-illustrated publication of 56 pages that is being distributed from the company's headquarters in Atlanta throughout the whole country as part of their efforts to attract new industries to Georgia. The contents include the history of the company, its hydro-electric properties, the interconnecting power system, other properties, an industrial map of Georgia, the territory the company serves, recent improvements, resources of Georgia, labor, education, and recreation in the State, and finally an article entitled "The New South." There is an abundance of interesting pictures, pertinent to the text and done in appropriate colors. The entire book is eloquent of the progressive spirit and enterprise which is characteristic of the company.

\$225,000 Apartment Building for Washington.

A 12-story structure known as the Army and Navy Apartments will be erected at 816-20 Connecticut avenue, Washington. Plans by the Fletcher Fireproofing Company, builders and architects, call for a structure of brick and concrete covering a site 57 by 89 feet, to involve the expenditure of \$225,000. Work will begin immediately.

A New Ferro-Phosphorus Process.

By GUY P. NEWBERN, Nashville.

A process for the manufacture of ferro-phosphorus in a blast furnace has just been patented by Joseph Warner of Warner Iron Company, Nashville, Tenn.—Patent No. 1646268 dated October 18, 1927, which consists of two steps.

The coke, phosphate rock and iron-bearing materials are charged into the blast furnace in the usual way and in proper proportions to produce a low-grade ferro-phosphorus in the first step, say 10 per cent to 17 per cent. A portion of this low-grade alloy is then charged back through the furnace a second time and the phosphorus raised to 22 per cent to 25 per cent.

The advantages claimed are the use of low-grade cheap phosphate rock and generally cheaper operation due to a larger amount of metal recovery and a smaller slag volume. By this process mill scale, mill cinder, turnings, borings and other metallic substances, as well as iron ore, can be used. The very much reduced amount of silicious matter in proportion to the metal produced results in a normal working furnace and a small slag volume similar to the usual pig-iron furnace practice.

Twenty-two to 25 per cent ferro-phosphorus can be made in a blast furnace by the Warner process as cheaply as the 18 per cent is now being produced.

Progress on 1,000,000-Gallon Water Plant.

Outlining progress on a water plant which it is building at San Benito, Texas, the Central Power and Light Company of San Antonio advises that, in addition to a capacity of 1,000,000 gallons per day, the plant will have an additional filter of 500,000 gallons capacity which may be equipped when the demand requires it. Equipment for filters, piping, control cabinets, dry feed chemical mixers and laboratory is being furnished and erected by the International Filter Company of Chicago. Other contracts include the following:

Pumps—Dallas office of Fairbanks-Morse Company, Chicago.
Cast iron pipe—U. S. Cast Iron Foundry Company, Birmingham, Ala.

Valves—Darling Valve and Manufacturing Company, Houston, Texas.

Power wiring, including switchboard for 2500-volt and lighting system—Mercedes Electric Company, Mercedes, Texas.

Plumbing and fixtures—F. L. Gay Plumbing Company, San Benito.

Cast stone coping—W. T. Liston & Son, Harlingen, Texas.
Structural and reinforcing steel—Orange Car and Steel Company, Orange, Texas.

Building material, including sand, gravel, cement and lumber, are being purchased locally, while the erection of the building proper and the installation of machinery are under the supervision of J. W. Wolter of the Central Power and Light Company.

Baltimore Traffic Bureau Reorganized.

James Carey Martien, president of the Baltimore Association of Commerce, announces that the traffic bureau of the Association has been reorganized. Following the recent resignation of A. E. Beck, Charles R. Seal of Washington, former senior examiner of the Interstate Commerce Commission, will head the bureau. According to Mr. Martien, "it will be the intention that the bureau shall be of assistance to the business interests of Baltimore in helping them enlarge their fields of activity, developing new territory and the general conduct of the bureau will be along the lines of both offensive and defensive activities."

"And, Having Done All, To Stand."

By FRANK Y. PONDER, Wichita Falls, Texas.

These words of "the Apostle to the Gentiles" came to mind afresh when I read Frank A. Goodwin's speech in the MANUFACTURERS RECORD of August 18. The admonition was peculiarly fitted to the people and conditions of Paul's day, but it is no less needed in our own day, and peculiarly so under present conditions. There was a time when there was no country of earth where a man could worship his God or express his thoughts about government or anything else displeasing to Church or State without incurring the risk of death or other punishment. No matter whether his statement was the living truth according to the Eternal Standard or not, if it were displeasing to king or clergy, his voice was silenced.

Later God raised up a few men who could "stand"—men who knew "their souls were their own"; men who had backbone, not spineless like earthworms and a great many politicians—and these men of courage organized people who were like minded and brought them to this new land of America, where they might worship God and found institutions and a social order that were in harmony with their views.

The conditions of life produced by their efforts were so nearly ideal that our country became a place of refuge for the oppressed of all lands. For many decades we took them in without question or restriction, and accorded them all the privileges of native born sons. In time our hospitality came to be terribly abused and we were made a dumping ground. Those whose views were entirely out of harmony with our ideas and efforts came into our midst and took advantage of our hospitality and commenced trying to tear down our house and destroy all that we had accumulated through 300 years of patient toil.

Furthermore, in this exacting, mechanical age, men are trying to answer, with exact proof, such questions as are beyond the realm of science, as they understand it, and they promulgate pure guesses as proven Truth. Other modern guessers accept these second-hand guesses as scientific truth. This all seems quite harmless, and might be so, if they would keep their guesses within their own charmed circles; but they propose to substitute these guesses for accepted truths—the foundation truths on which the great structure of our civilization is built. If the foundation is torn out, the building is bound to fall. Take away omnipotence from God and there is no God left. Take the penalty away from law and there is no law left. Law without penalty becomes mere friendly advice. The Gospel, without eternal suffering for the lost, is senseless platitudes.

To be a young man and live through the next 25 years is one of the greatest privileges and heaviest responsibilities of all the ages. Loose thinking must be tightened up all along the line. It will require men of the Pauline type to do it. Like Paul, they must be able to say: "I know," and stay with it if they must rot in prison for it.

In this new era there must be a rebirth of patriotism. It will not be a counterpart of the old order of that fine attribute, but it probably will be much less of a lip service. Fine words will not count as much as fine actions. We already have seen many matchless examples of the new patriotism; we shall see such as these multiplied many fold. Indeed, the constructive spirit is coming to be the rule, in our industries. These great leaders in industry are discoveries and not so much creations. We are going to discover a great many of these creative spirits and press them into other service besides industry. We need them for statesmen, to take the places now occupied by weak kneed politicians. We must have men

who can "stand," like Governor Fuller, when the time of testing comes. It is more heroic to live and fight for a cause than to die and lose it.

We have come to the time when we realize that service is worth what it costs, though we still are paying, for amusement, all out of proportion to the higher forms of service. When we pay more for service we are going to be somewhat more exacting about its quality. We are going to "stand" for a better administering of our laws and we are going to get it. We are going to require our preachers to "declare the whole council," without fear of being deserted for doing it. Leave out hell fire, damnation and total depravity, and there is no word of life to preach, the sermon becomes a mild lecture. Men must come to know God as a Father and friend, and not as a tyrannical despot. When men know this they have a changed attitude toward all law. When a man knows that God is his best friend, he has a new restraint on his actions and conforms to law from a new motive. He obeys to please—to be agreeable—and not because he fears.

This government of ours is a "new thing under the sun." It has lived through the ages in the hearts of men and women, but never before a short 150 years ago had its counterpart been a living fact. There is no other like it today. It seems a safe guess that there never will be another like it, because there is no other North America where it could be planted and grown. Besides that, the little handful on the passenger list of the Mayflower could not be duplicated. When we think of the awful hardships of that voyage and the more terrible suffering of that first winter, we ought to be ashamed of our lukewarm patriotism. We ought to be ashamed that we do not appreciate more highly the liberty their sufferings brought us. We ought to be ashamed that we sit with folded hands and silent lips when our God is slandered, our laws are ridiculed and our hospitality is treated with open contempt.

In the name of Liberty, we tolerate things that are beyond even the most liberal license. Apart from God, man knows nothing about Liberty. All he knows about Freedom, God taught to him. No atheist can fully comprehend the meaning of Liberty. No anarchist can comprehend or appreciate the beneficence of our laws, except when the hand they restrain is uplifted to injure him, Sacco and Vanzetti eagerly took advantage of every form of appeal our liberal laws allow—laws that prolonged their lives for seven years—but, they were not willing to be restrained from destroying the lives of others and taking their property.

Truth will prevail if it is proclaimed and fought for, but it never will come to harvest if we let it be smothered to death by lies. If these alien bolshevists want to plant weeds in their own fields, let them go to it. The reason we have such wonderful institutions is the direct result of the kind of seed we planted, and we have no business to let outsiders come in and poison our fields and ruin our crops. We are so accustomed to our privileges that we have no thought that they are unique in the experience of men. There are other republics, but none like ours; there are constitutions, but none like ours. I am afraid that few of us grasp the full meaning of that oft repeated phrase, "A government of the people, for the people and by the people"—of the people, not the aristocrats; for the people, not the King or Government; by the people, not by the parliament of the legislature in each State. When the King made the laws, he made them to protect his interests and not for the best interests of his subjects. When parliament made the laws, they were laws to protect the classes. We, the people, make ours and all the parliaments and kings and congresses and legislatures of earth cannot change them without a three-fourths of this same vote.

We are within our rights to criticize our officials when they fail in their duties, but have no sort of right to be continually sneering at the basic law, since this basic law suits three-fourths of our neighbors, otherwise it would not stand. All

the loose talk, jokes and sneers about the Eighteenth Amendment is open rebellion. It is nothing short of anarchy, and we have no business to allow it. Under the "beneficent" protection of communism, men and women are shot, every day, in Russia for a slight criticism of the powers that be. Thirty-five years ago the spread of cotton boll weevil could have been prevented if our interest could have been aroused; today the spread of bolshevism in our country can be stopped if our interest can be aroused.

The respectable, honest, hardworking citizens of this country have been a laughing stock for imported outlaws, soft-headed college professors and home grown cowards too long. If they want to plant noxious weeds in their own gardens, let them; but they should be stopped from planting them in the fields and gardens of others who want to grow fruits and flowers. We have laws to protect us against impure food and drugs, but have we no laws to protect against impure literature, art and music?

A great deal of stuff that is tolerated under the guise of free speech is nothing short of sedition. Are our laws so liberal that we cannot stop it? or is it because those who are supposed to enforce the law are too cowardly to do it? In Texas there is a law forbidding Sunday shows, and in one town the picture show crowd said to the preachers: "If you close our show houses on Sunday, we will close your churches, because you have hired organists and singers," and the preachers quit the fight. Even many preachers have forgotten how to "stand."

Further, an officer who is elected and paid to enforce the law sometimes says to himself, "Why should I exert myself to enforce the law and refuse to accept 'hush' money? Doing my sworn duty will add nothing to my income, so why should I make a chump of myself?" In a sheriffs' campaign last year one candidate said: "Elect my opponent and he will enforce the law and we will have a 'hick' town." His opponent said, in substance: "My opponent is mistaken." The latter was elected and has made good his promise. Is it any wonder there is no respect for law? There is no certain impending doom for its infraction. Two imported anarchists may kill and rob our best citizens and evade the laws penalty for seven years, or they may be allowed to go free altogether.

When the test came Fuller "stood." Continue to let a few of our basic laws be sneered at and ridiculed by any "Red" corner orator, and before we know what has happened we will be dominated by a little handful of outlaws, just as the millions of Russia are now dominated.

Industrial Survey of Virginia to Be Made.

Richmond, Va.—First steps toward the making of a comprehensive industrial survey of Virginia were taken recently when the board of directors of the Virginia State Chamber of Commerce adopted resolutions indorsing a recommendation of the State chamber's committee on industry and power development.

The report of the committee pointed out the need of immediate compilation of industrial information not only for home consumption but in order that industrial interests outside of Virginia might be correctly informed of Virginia facts and inquiries received by various Virginia agencies seeking data on Virginia's advantages might be answered with the maximum of efficiency and results. The resolutions requested Junius P. Fishburn, president, to confer with the Virginia State Conservation and Development Commission in connection with carrying out the project.

All records for the production of cigars in Tampa were broken in October when local factories turned out 57,757,888 cigars.

Survey of Alabama Mineral Resources.

By ROBERT L. STEFFEY, Birmingham.

As the custodian of Alabama's natural resources, the State geological survey, under the new director, Dr. Walter B. Jones, is launching a four-year program made possible through a large increase in appropriation for the necessary field investigations leading to the immediate development of the State's many resources. Plans were laid months ago by the late Dr. Eugene A. Smith, State geologist for 54 years, with full collaboration and assistance on the part of his successor, Dr. Jones, to enlarge the scope and usefulness of the survey by furnishing more complete data on Alabama's mineral resources, occurrences and economic importance, the primary purpose being to render immediate service to those wishing to develop such resources.

With this expansion and plan of economic assistance in view, an increase in the survey's appropriation from \$12,600 annually to \$30,000 for the first year, commencing October 1; \$40,000 for the second, and \$50,000 for the third and fourth years and thereafter, was asked of the legislature and was granted, and the day on which Dr. Smith was stricken with the illness from which he did not recover, he was advised that the Governor had signed the Act.

The petroleum possibilities of Alabama are to be given first consideration, since interest in this important resource is gradually taking the form of extensive drilling activity again. Dr. Douglas R. Semmes, who was professor of mineralogy and geology at the University of Alabama from 1919-21, has returned to Alabama and has commenced revision of earlier work here by field investigation in Lawrence county, collecting data and checking the petroleum possibilities of that area. At least one staff geologist of the survey will be in the field all the time, to check formations, secure samples of cuttings or cores and otherwise to help oil operators on the location. The full staff of the survey will assist in the analyses and determinations of these cuttings or cores.

As recommended by Dr. Jones and approved by Governor Graves, the survey has entered into a co-operative agreement with the United States Geological Survey on the preparation of important and extensive reports on coal and iron ores. Dr. Charles Butts, who prepared the section on the paleozoic formations in Special Report No. 14 on the Geology of Alabama, published lately, has been designated by Dr. George Otis Smith, director of the Federal Survey, to furnish the report on the coals of Alabama and the work of preparation commences this winter. The report on the iron ores will be handled by Dr. E. F. Burchard, who is in charge of the iron and steel division of the United States Geological Survey. The preparation of these reports will cost the survey scarcely more than \$2000 each, and the printing bill of each publication will not run more than \$3000.

It will be the duty of Jelks Barksdale, who joined the survey under the new appropriation coming from the Bureau of Mines, to prepare a careful and detailed survey of every mine, quarry, pit and furnace in the State. The results of this investigation will be carried on a card index, and when completed will be published in the form of a glossary. A file in card index form to take care of inquiries respecting quarries, mines, furnaces or anything in the mining or manufacturing line involving mineral resources, is a sorely needed proposition, says Dr. Jones.

Field work has been completed for a report on bauxite in Alabama, and analyses of samples are now being made by Dr. Hodges, chemist of the survey. This report will be released during the coming winter.

Lime and building limestone industries already have been studied carefully and the results of this investigation will be

incorporated in a report during the course of the present program on limestone and its uses in Alabama.

A report on the economic botany of Alabama, a catalogue of the woody plants, by Dr. R. M. Harper, is almost ready for the printers, Dr. Jones announces, having been in the course of preparation for more than 20 years.

Dr. Stewart J. Lloyd, professor of chemistry at the University, will prepare a detailed report on the clays of the State. This work will be completed within two or three years, and it is also expected that a report will be prepared on the sand and gravel deposits of the State, in the course of the four-year program.

The survey will issue annual statistics of the mineral production of Alabama, with appropriate discussion of the status of each industry.

The favored section of the State in the present drilling-for-oil campaign is the northwestern part, but other areas may show activity as soon as plans can be made and leasing is finished. The Tennessee Valley Oil and Gas Company is drilling in the town proper of Gurley, west of Huntsville; the Greater Huntsville Oil and Gas Company is drilling its first test in southeastern Lawrence county, and Kelsey and Jarrell have practically completed a large block of leases northwest of the old Goyer well. Northwest of Moulton, the county-seat of Lawrence, the Southern Oil Company of Florence, Ala., is down 1520 feet in the Trenton limestone with a well on the Horton farm, and the Lawrence County Leaseholders, Inc., has blocked up about 15,000 acres. Northwest of Florence the Great Southern Oil Company has blocked up more than 10,000 acres, while S. A. Hobson is active around Haleyville and Atwood.

The old Fayette gas area is arousing attention, and interest is considerably revived in the northwestern section of Alabama, because of the adjacency of the Amory gas well to the State line. The gas well is making 5,000,000 cubic feet daily, with a rock pressure of 900 pounds from the carboniferous rocks at 2470 feet. Nine wells are drilling in the immediate vicinity of this discovery well; the Texas Company and the Natural Gas and Fuel Corporation are each drilling a well near Columbus, Miss.; the Ohio Oil Company has over 30,000 acres under lease in the Amory district and in Marion and Lamar counties, Ala., and the Gulf Refining, Standard Oil of Louisiana, Pure, Benedum & Trees and Lion Oil and Refining are reported as interested around the two major company wells drilling near Columbus. Others have under lease various blocks in Lamar, Marion and Fayette counties.

The Jagers Oil Company has recently abandoned a test in Monroe county near Georgiana at 3165 feet, but the information gained has led to other locations and a derrick is erected and rig is being set up preparatory to drilling some three or four miles from the first test.

In the extreme southeastern corner of the State, below Dothan and near the town of Cottonwood, J. R. Sealy, lumberman and large property owner, has commenced drilling a couple of deep wells. Several blocks are being assembled by prominent citizens of the State, particularly in the Coastal Plain section, with the idea of securing development. J. Lee Long, Speaker of the House, is heading a group blocking up around Greenville in Butler county, and Dr. W. C. Gewin, large real estate owner of Birmingham and head of the Bankhead Hotel Company, is leasing around Greensboro, in Hale county.

From increased activity indicated in all sections of the State it would appear that the new four-year program of the Alabama Survey is being inaugurated at an opportune moment, and the increased appropriation has made it possible for members of the survey who have had oil experience, including the new director, Dr. Jones, to render almost invaluable service to the oil industry at this interesting time.

A Suggested Plan for Benefitting the Citrus Growers of Florida.

W. J. Howey of Howey, Fla., who is carrying out one of the greatest citrus grove industries in America, already having some 12,000 or 13,000 acres in groves, owned largely by leading people throughout the country, but under the management of the W. J. Howey Company, and who is pushing this plan to include 60,000 acres which his company owns, has given great attention to the marketing of citrus fruit. In an extremely interesting and suggestive letter on this subject, he writes the MANUFACTURERS RECORD as follows:

"At a recent gathering I took the stand that the Citrus Exchange or some co-operative agency should take the bold stand in Florida in acquiring the citrus crop so as to control its distribution, and I am of the opinion that a minimum price per box should be guaranteed every grower who affiliated with this co-operative agency and any excess returned to him in an annual pool, less a retain of an agreed percentage, perhaps 10 points, for a revolving fund for emergency purposes. This immediately would put the independent packer on the defensive, because he must realize a profit from the fruit he buys. They usually guarantee a minimum of 90c to \$1 per box and secure a profit of 50 per cent. The co-operative agency would not need to do this; thus the grower would fall heir to a higher price for his product and all there was received for it, less the retain for the revolving fund, and he would in the end get that. This would enable the co-operative agency at once to say to what market the fruit should be shipped, and when, and cull his pack heavily, and would need to dispose of only 70 per cent of the crop to raise the price to a higher figure than is now received for the full crop produced. The fact that certain brands of fruit sell on the market and net the grower from \$3 to \$5 per box on the tree at once determines the value of a box of fruit.

"The grower is the man penalized, while the independent receives his box profit and through valuation reaches an aggregate of from thirty to sixty thousand per year in the operation of his packing house, while the grower's profit is dissipated because of his short-sightedness in tying up with the man who doesn't play for the high dollar, but rather for the box operation of values.

"The late Dr. Ross and the writer fought this out years ago and he termed it socialistic or class legislation, but so is co-operative marketing, so is banking in Wall Street. They are at least friendly enemies; they stand for the profit of the stockholders and do not fight each other. So is the Government of Switzerland socialistic, but they stand together.

"The business enterprise or the industrial institute borrows money through the medium of a bond issue and guarantees the rate of interest—unless that institution is able to manufacture a product and get a good price it will go into default. Why, then, should a crop of fruit produced in Florida and California combined need depress to a point, in some instances, where it represents a loss—all because too many cars reach point A to Z a day, whereas, if only enough fruit reaches points A to Z to meet the requirements and no more, then there is a price received which will in many instances net the grower the figure quoted.

"There is now a sort of honest-to-goodness movement on foot in Florida or at least a disposition, I should say, on the part of the business men to get their feet under the round table and talk it out. Some such meeting is going to take place in Tampa and I wish you could be at that meeting. I will be advised of the exact date and if there is a possibility of your being there I will wire you.

"Edward W. Lane, president of the Atlantic National Bank of Jacksonville, has taken the position, and it is a good one, that the banks of the State must awaken to the fact that the growers must be financed and that the banks should finance the grower's crop until this can be marketed. This would work finely through some auxiliary to the co-operative agency, but it will, of course, have to be closed with a contract that won't leak."

Rivers and Harbors Congress to Meet.

The twenty-third convention of the National Rivers and Harbors Congress is to be held in Washington, D. C., December 7-8. Waterway development and various phases of the flood control problem are to be discussed.

Condemns Federal Estate Tax.

Cedartown Cotton and Export Company.

Cedartown, Ga., November 25.

Editor Manufacturers Record:

I learn through reports from Washington that the Ways and Means Committee will in all probability pass upon the important provisions of the revenue measures next week.

They will likely retain the inheritance tax provision intact by a solid Democratic vote favorable to its retention and a divided Republican vote for its repeal. There are 25 members of the Ways and Means Committee, 15 Republicans and 10 Democrats. The final test is, of course, on rolloall in the House and it looks like an even break, but, of course, the lines are not clearly drawn.

I consider the inheritance tax one of the worst taxes that the Government has inflicted on a long suffering people and I cannot understand why "a solid Democratic vote should be favorable to its retention."

At the best, while I am opposed to any inheritance tax, it should be left to the States and not the Federal Government.

It always irks me to speak of Democrats or Republicans. I believe that every legislator should legislate for the benefit of the country and the people, irrespective of this damnable thing called politics.

CHARLES ADAMSON, President-Treasurer.

\$660,000 Tulsa Bonds Bring \$17,373 Premium.

Tulsa, Okla.—City bonds amounting to \$660,000 sold recently for a premium of \$17,373. Included were \$555,000 sewer bonds, \$75,000 for the Midland Valley underpass at 6th street and \$60,000 for the heavy traffic driveway to the West Tulsa bridge. The Producers National Bank purchased the sewer bonds, paying a premium of \$14,991. The Exchange Trust Company was high bidder on the other two issues, paying a premium of \$1315 on the underpass issue and \$1067 on the heavy traffic bonds.

Domestic Pumps and Water Systems.

October shipments of domestic pumps and water systems, as reported to the Department of Commerce by 32 manufacturers, aggregated 8365 water systems, 42,201 pumps and 12,768 cylinders shipped separately. The table below presents a comparative statement of shipments for the first 10 months of 1927, with comparisons for 1926. Prior to January, 1927, statistics on pumps were collected by the Federal Reserve Bank of Chicago.

SHIPMENTS OF DOMESTIC PUMPS AND WATER SYSTEMS.

Year and month	WATER SYSTEMS			Gasoline engine driven pneu- matic Number of units	Hand- operated driven pneu- matic Number of units	Pitcher	Pumps Other hand and windmill Number of units	Power	Cylinders shipped separa- tely
	Electrically driven								
	Deep well 3 H.P. and smaller. Number of units	Shallow well							
		Under 500 GPH. Number of units	500 GPH and over. Number of units						
1926									
September	1,352	5,118	346	582	136	16,688	22,566	659	16,139
October	1,019	5,474	298	543	129	23,445	16,682	432	11,941
Total (ten months)	9,019	51,145	3,082	2,919	1,470	243,795	233,895	5,425	184,791
1927									
September	1,136	6,668	106	82	219	19,928	23,079	1,492	14,766
October	1,042	6,492	95	104	632	22,119	18,324	1,758	12,768
Total (ten months)	10,012	56,320	1,199	906	2,327	230,997	194,224	10,228	137,688

Cotton Production and Consumption.

According to the Government's preliminary report issued November 21, the number of bales of cotton ginned from the growth of 1927 prior to November 14 amounted to 10,899,132 running bales, counting round as half-bales and excluding linters. For the similar period of 1926, 12,956,444 bales were ginned and 12,260,352 bales were ginned up to the corresponding date of 1925.

Cotton consumed during the month of October, 1927, amounted to 612,935 bales, cotton on hand in consuming establishments on October 31 was 1,327,095 bales, and in public storage and at compresses 5,433,129 bales. The number of active consuming cotton spindles for the month was 32,497,504. The total imports for the month of October, 1927, were 19,235 bales and the exports of domestic cotton, including linters, were 1,126,500 bales.

The preliminary estimated world's production of commercial cotton, exclusive of linters, grown in 1926, as compiled from various sources, is 27,900,000 bales of 478 pounds lint, while the consumption of cotton (exclusive of linters in the United States) for the year ending July 31, 1926, was approximately 23,940,000 bales of 478 pounds lint. The total number of spinning cotton spindles, both active and idle, is about 164,000,000.

Organized to Promote Industrial Development.

Burlington, N. C.—Organization of the Hardin Industrial Cities Corporation, chartered under the laws of Delaware, with an authorized capital of \$2,000,000, with home offices here, has been announced by Junius H. Hardin. While Mr. Hardin has not made public the names of his associates in this enterprise, the purpose of the corporation will be to foster industrial development in communities after a careful study and analysis has determined in the minds of officials what industry is best adapted to a certain community.

\$500,000 Addition for Baltimore Hospital.

A gift from Frederick Bauernschmidt provides for the erection of a \$500,000 addition to the Union Memorial Hospital, Baltimore. Joseph Evans Sperry, Baltimore, has been selected as the architect. Ground will probably be broken for the structure in the early spring. The addition will provide for 128 beds. Architecturally it will conform to the present structures. The first floor will be used for administrative offices and rooms for the internes. A solarium will be located on the top floor.

Fire-Extinguishing Equipment.

October shipments of fire-extinguishing equipment, as reported to the Department of Commerce by practically all manufacturers in the industry, totaled 100 pieces of motor apparatus and 47,529 of hand types, as compared with 119 of motor and 45,035 of hand types in September and 149 of motor and 44,334 of hand types in October, 1926.

THE IRON AND STEEL SITUATION

Pittsburgh Steel Market.

Pittsburgh, November 28—[Special.]—Steel tonnage, in demand and production, continues to be very well sustained as to the total, and little chance remains of any tapering off in the closing weeks of the year, as there has been so often. Hand-to-mouth buying has been pursued with such rigidity that there are no stocks to liquidate for the annual inventory taking. By the same token, a large increase in tonnage is to be expected immediately after January 1. This has occurred so regularly in recent years as to be a recognized seasonal swing. The increases have varied, but a generalization may be made that 20 to 30 per cent increase, comparing March production with that of December, is to be expected. Such a prediction, of course, makes no comparison between the total tonnage of the present calendar year and that of next year. The general probability is that next year will be better than this year on the whole, but no great change in either direction is to be expected, for steel has dropped into very steady habits in the past few years.

Steel production in November ran about the same as in the four preceding months, when unprecedented steadiness was shown, by the testimony of the official monthly reports. Production of ingots has been at about 68 per cent of full reported capacity, or 78 per cent of nominal or so-called "practical" capacity. In a few finished lines there have been slight decreases in production in the past two or three weeks, these being approximately balanced by increased production of rails. Chicago reports 68,000 tons of additional rail orders, the total rail buying on the present movement now aggregating about 1,125,000 tons. While nominally the deliveries extend over the first six months of 1928, some of the roads furnished specifications early; on these rail mills are now engaged. Rail production is now at about 50 per cent of capacity, against only about 25 per cent for several months. The Ensley mill, however, runs pretty steadily throughout the year.

The Ford Motor Company has not yet placed any orders for steel of consequence, and there is no knowledge as to when large orders will be placed. The trade does not doubt that the buying will begin in a few weeks, and that once the company is ready it will as always insist upon very prompt service. The remainder of the automobile industry is marked for seasonal increase in buying within a very few weeks, as production of automobiles has always increased in January.

The agricultural implement industry continues to run at a high rate and is having by far the best year in its history as to total turnover. Operation is much heavier than a year ago.

There is no new trend in finished steel prices. Bars, shapes and plates have lately had an advance of a dollar a ton, to 1.80 cents Pittsburgh and 1.90 cents Chicago, while sheets and strips are a shade easier in the past week. In these two lines prices are quite irregular. In strips there was for many years a single base price, subject to usual extras or differentials, but the number of prices has been increasing, according to gauge, width and tonnage. Demand for wire products is now tapering off somewhat, except in the South. Prices are approximately the same as formerly. Mills hold prices quite well on miscellaneous orders, but distributors have their preferentials and are generally able to sell single carloads of nails at the prices the mills openly quote.

Standard Sanitary Manufacturing Company recently closed for the pig-iron requirements of its Baltimore plant over the first six months of the new year, and is now buying for the Louisville plant and the two plants in the Pittsburgh district.

Connellsville coke remains very dull and is a shade easier

on all descriptions. Heavy melting steel scrap remains quotable at \$14 to \$14.50 delivered Pittsburgh district. Mill demand is very light, as stocks are being cleaned up, yet material is not pressing on the market and higher prices are apparently in prospect.

Birmingham Iron Market.

Birmingham, Ala., November 28—[Special.]—Pig-iron market is quite active, sales are numerous and the understanding is that delivery will be completed on all purchases by the end of year. Indications point to considerable rush in delivery through December, the usual stipulation being—since the \$16 per ton, No. 2 foundry base, has been on—that there would be delivery before January 1. Production has been fairly steady and the aggregate for the month will be around 210,000 tons, with 10 blast furnaces making foundry iron, six on basic and one on special brand. Foundry iron surplus has not been reduced any during the month.

Inquiries are again reported by furnace interests as to iron for the first quarter of the year and it was expected that sales would be made for that period before this. However, it is apparent that the time is rapidly approaching when business for the first quarter will have to be given some attention and before the end of the week a price base will be sounded out by one or more of the iron manufacturers and selling started. Indications now are that considerable moving of iron will take place during December and the surplus stock may be called into action, or a portion thereof at least. It was stated some time back that the Sloss-Sheffield Steel and Iron Company intended rebuilding its No. 1 city furnace and belief is expressed that this will be undertaken during 1928, success having been attained with the No. 2 furnace. The latter is making upwards of 405 tons of iron daily, an average good grade right along. In addition, there is a minimum of loss of ore and coke in the flue dust. There are other savings that are making a showing. The slag, too, is proving of a better quality and more valuable in that it is very hard and will find a ready market for road building as well as other construction where the hardest possible slag is required.

Basic iron has been piled up and a steady melt is noted, though the steel market is not considered as active as it was the first of the year. Gulf States Steel Company has four out of six open-hearth furnaces in operation at its Alabama City plant. Tennessee Coal, Iron and Railroad Company has 12 out of 17 open-hearth furnaces in operation. Orders for rail and other shapes of steel from railroads have come in slower so far this fall than last year. But after January 1 there is in sight rolling for four months at least in the rail mill alone. Fabricating works are still going along, with local contracts coming in from time to time and larger contracts from a distance. Virginia Bridge and Iron Company is to furnish the structural steel for the Watts office building in the heart of the business section of Birmingham, excavations for which are now being worked on. Ingalls Iron Works Company has completed the gates for the big spillway of the latest hydro-electric plant at Lock 18, near Wetumpka, on the Coosa River, 1400 tons of steel being used. In addition to the 1400 tons of steel for gates, 1000 tons of reinforced steel has been used on the big dam.

The coal-mining industry is a little under normal, warm weather affecting the demand. It is estimated that production is around 377,000 tons weekly yet, 400,000 tons being normal. Coke is fairly steady with a little stock accumulated with independent producers, not yet sufficient, however, to cause alarm.

The old material market is still slow with prices low.

Heavy melting steel, delivered, is being quoted at \$10.75.

Quotations for pig-iron and iron and steel scrap follow:

PIG-IRON.

No. 2 foundry, 1.75 to 2.25 per cent silicon, f. o. b. furnaces, \$16.00; No. 1 foundry, 2.25 to 2.75 per cent silicon, \$16.50; iron of 2.75 to 3.25 per cent silicon, \$17.00; iron of 3.25 to 3.75 per cent silicon, \$17.50; charcoal iron, f. o. b. furnace, \$29.00.

OLD MATERIAL.

Old steel axles	\$16.00 to \$17.00
Old iron axles	16.00 to 17.00
Old steel rails	11.50 to 12.00
Heavy melting steel	10.50 to 10.75
No. 1 cast	14.00 to 14.50
Stove plate	13.00 to 14.00
No. 1 railroad wrought	11.50 to 12.00
Old car wheels	14.00 to 15.00
Old tramcar wheels	14.50 to 15.00
Machine-shop turnings	8.00 to 9.00
Cast-iron borings	8.00 to 9.00
Cast-iron borings (chem.)	13.00 to 13.50

The Metal Market.

New York, November 28—[Special.]—Among the things which the metal producers and sellers had to be thankful for on the national holiday last week were the large sales and the higher prices. Though there was one less day upon which to sell, the transactions were concentrated in the four and a half business days.

All of the metals are now in price comfortably above the low levels of the year, reached early in November. The advance in copper has been sharpest and that in lead has been the least. However, the latter was holding steady earlier this month when other major metals were seeking the bottom.

Several important outlets for consumption are developing in a satisfactory manner. Railroad freight car inquiries are the best since June, with 9350 cars in state of inquiry. Automobile production is normally at the lowest state in December, but this year the coming of the Ford Motor Company into production of its new models should cause a quicker recovery in output. Because of the light canning operations in 1927 the canners anticipate a better year in 1928. Building operations are holding up remarkably well, October awards having been the largest for that month in history, thereby signifying a large demand for lead and zinc in the form of pigments, lead and brass in piping and copper for leaders and gutters.

One of the most important developments of the week was the marking up of the zinc ore price in the tri-State district to \$36 per ton, the first advance after a long series of declines. Surplus ore is in stronger hands than previously. It is probable, therefore, that a much-needed turn for the better has taken place in the zinc industry.

The metal producers expect to make the best sales of the year at this time and during the past few days they have not been disappointed. Zinc consumers have bought largely for January and February delivery, being covered on needs for this year. Present zinc prices are considered bargains. Copper users are starting to buy for January. In tin circles purchasing has included April shipment. Users of lead are buying for January freely.

The official price of copper for export was advanced from 13.80 cents to 13.95 cents and then to 14.05 cents c. i. f. European ports, the first time that the figure of 14 has applied to the copper price in many months. Producers expect that the domestic price will soon be 14 cents, delivered to the Connecticut Valley, a price which will afford substantial profits for all properties now in operation. The present domestic quotation is 13¾ cents.

After every price advance the foreign users have come back for more. Government figures as to copper exports in October showed 37,338 tons, compared with 43,232 tons for the preceding month. Imports were 23,490 tons, compared with 11,442 tons in September. The largest shipments last month were to England, followed by Germany and France.

Italy has been buying much copper of late for converting into copper sulphate for spraying vineyards. Russia has taken considerable copper. Turkey is to make an elaborate extension to her telephone system and hence will be a large copper user. In fact, purchasing of copper on the part of Europe has been heavy during the past three months. The demand for copper in the United States is nearer the saturation point than in Europe. The latter has regained the comfortable necessities of life following the war's destruction. She is now in process of accumulating the more advanced necessities along with what may be considered certain luxuries. It has often been said that the extent of the use of copper measures the degree of civilization. Nearly all modern conveniences contain copper: the washing machine, radio, automobile, the home ice-making refrigerator, etc.

Those imaginatively inclined saw a new and symbolic use of copper on Armistice Day on Broadway, New York. The curb was lined with a series of American flags, floating on flag poles of copper tubing. The "everlasting metal" was supporting the flag which all patriotic Americans hope will be everlasting.

Plans of the new Copper Institute are going forward rapidly and another announcement of progress will be made by its president within the next 10 days. Probably the compilation of statistics will be the most thorough for any industry in the country. The American Iron and Steel Institute, for instance, is concerned almost exclusively with production. The Copper Institute will also delve thoroughly into consumption, distribution, sales, costs of production and will make estimates of the probable future showing. Some of these figures will be compiled weekly.

The tin market was in a healthy state last week. Sales on Wednesday were 500 tons, unusually large for a day preceding a holiday. Consumers were the only purchasers that day. An interesting feature was the exporting of some tin from the United States to London—like "carrying coal to Newcastle." The tin had been arranged for export a few days back when prices here were the lowest in the world.

The official price of lead at New York has been unchanged since the middle of September at 6.25 cents per pound. Meanwhile the quotation in the East St. Louis district has fluctuated between 6 cents and 6.10 cents per pound; in fact, traveling that distance the past week, closing at the higher figure. Sales were brisk, leading producers having sold from 500 to 750 tons daily. Lead is regarded as the steadiest of the metals and has adhered to that role over the past several weeks.

Sales of zinc have been made as high as 6 cents per pound, East St. Louis, during the past week, this figure applying to future delivery. Prompt zinc at the close was 5.90 cents, as against 5.60 cents two weeks ago. Sales have been only fair.

Capt. Ed. Kennedy Has a New Railroad Plan.

According to a press report from Amarillo, Texas, Capt. Ed. Kennedy is promoting plans for the construction of a railroad from Caprock, a new town near the rim of the cap rock between Lubbock, Texas, and Roswell, N. M., a distance of about 40 miles. It is further stated that he owns the old survey and dump of the old proposed Altus, Roswell and El Paso Railway extending from Wellington, Texas, to Roswell and that he intends to build over that route. Contract for raising the grade and widening the crown of it has been let to John S. McKnight of Amarillo. The name will be changed to Roswell-Northwestern Railway.

Captain Kennedy, it is stated, surveyed the Altus, Roswell and El Paso line about 15 years ago and built 60 miles of railroad from Altus, Okla., to Wellington, Texas, which was acquired by the Missouri-Kansas-Texas system. He has lived at Houston for some years.

RAILROADS

Facts About the Freight Movement.

Loading of revenue freight on the railroads during the week ended on November 12 totaled 974,862 cars, according to reports filed by the lines with the Car Service Division of the American Railway Association. This was a decrease of 63,990 cars below the preceding week this year, reductions being reported in the loading of all commodities except livestock, coal and coke which showed an increase. It was also a decrease of 132,027 cars under the same week last year and 75,078 cars below the same week in 1925. Since January 1 last there have been 46,473,139 cars loaded with revenue freight, which compares with 47,340,437 cars loaded during the corresponding period of 1926 and with 45,542,689 cars loaded during the same period of 1925.

The volume of freight traffic handled by the Class 1 railroads in September amounted to 42,954,142,000 net ton-miles, according to the Bureau of Railway Economics. This was a decrease of 1,391,603,000 net ton-miles, or 3.1 per cent under September, 1926. There were decreases in the East and the South, but the Western district reported an increase of 1.4 per cent.

For the first nine months in 1927 the volume of freight handled by the Class 1 railroads amounted to 357,294,784,000 net ton-miles. This was an increase of 365,058,000 net ton-miles, or one-tenth of 1 per cent above the corresponding period last year, and was 7.2 per cent above the corresponding total for 1925.

To Encourage Tourist Travel to Mexico.

Laredo, Texas.—Co-operative efforts are to be made by the National Railways of Mexico and the Missouri Pacific and Southern Pacific lines to build up a large tourist travel to Mexico. With this object in view, the National Railways will establish passenger offices in San Antonio and other cities of the United States. During the administration of President Porfirio Diaz, some years ago, thousands of American tourists visited Mexico each year, many special trains being run to accommodate the travelers. As a part of the present plan an enormous amount of literature picturing the beauties of Mexican scenery, the splendid climate of the mountain and plateau regions, and other facts tending to present the country in favorable light, will be distributed throughout the United States.

Bernard M. Baruch on B. & O. Board.

At the annual meeting of stockholders of the Baltimore and Ohio Railroad Company, which was held in Baltimore on November 21, Bernard M. Baruch of New York city was elected as a member of the board of directors to fill the vacancy caused by the recent death of R. Brent Keyser of Baltimore. All the other members were re-elected. Mr. Baruch is a native of South Carolina, having been born in that State August 19, 1870. He has been prominent for years as a banker in New York. During the World War he was a member of the Advisory Commission of the Council of National Defense and later was chairman of the War Industries Board, besides holding other positions relative to the prosecution of the war by the United States.

Locomotive Repair Contract Awarded.

A contract for the repair of 12 Class H-4 Mallet locomotives has been awarded to the Newport News Shipbuilding and Dry Dock Company by the Chesapeake and Ohio Railway. The work is to be done at an approximate cost of \$300,000 in the shipbuilding company's shops at Newport News, Va.

PRESIDENT WILLARD ON RAILROAD MERGERS.

Consolidation Favored by Baltimore and Ohio Executive But Not Amendment of the Law.

Daniel Willard, president of the Baltimore and Ohio Railroad Company, was the guest of honor at a dinner given to him at the Hotel Belvedere, in Baltimore, on November 21 by 63 prominent citizens of that city in recognition of what he has accomplished for the transportation system since he became president in 1910 and also for what he has contributed to the common good as a citizen of Baltimore. In the course of an address which he delivered before his hosts and a number of invited guests, he spoke on the subject of railroad consolidations, in part, and in response to a request, as follows:

"The law as it now stands places upon the Interstate Commerce Commission the duty of preparing and promulgating a final plan for the consolidation of all the railroads of the country into a limited number of systems. This, in the nature of things, is a difficult task, and although nearly seven years have passed since the law became effective, no final plan has yet been announced. A movement has developed looking to an amendment of the law which would relieve the Commission of this duty and permit voluntary consolidations without such a plan.

"I have not felt that such an amendment was necessary or desirable at this time. I have thought, and still think, that if the railway managers and the public officials who are charged with the responsibility would co-operate in a real and sympathetic effort to bring about what Congress clearly had in mind and has expressed in the Transportation Act, that consolidation such as contemplated in the Act could be accomplished without the need of additional legislation.

"I believe that consolidation of the kind proposed is economically sound and ought to be had in the public interest, and I also believe that if it is not brought about in some such way as I have suggested, that Congress may very likely take steps to secure it in some other way and possibly with less satisfactory results than might now be achieved. * * *

"If we are to have consolidation of railroads as a governmental policy, then I want to see the Baltimore and Ohio continue relatively just as strong under the new conditions as it is now under existing conditions, and it seems to me that the public interests, and more specifically the interests of Baltimore, will be best promoted by such an arrangement.

"This is why I am in favor of a four-system grouping in the Eastern region, and why I am opposed to any other arrangement which would in effect leave the Pennsylvania and New York Central as strong or stronger than they are today, while the Baltimore and Ohio would be relatively weaker.

"Some months ago, as is generally known, the Baltimore and Ohio purchased a substantial holding in Western Maryland stock. The reasons for our action have been fully explained. The question naturally arises—should the Baltimore and Ohio and the Western Maryland be put together? I think they should, because I believe such an arrangement to be economically sound and in the public interest. I have frequently stated before the Interstate Commerce Commission and elsewhere that I did not consider the Western Maryland vitally necessary to the Baltimore and Ohio; nevertheless, I think such a combination economically desirable in the public interest. I have also said that we of the Baltimore and Ohio would not desire to take over that property in the face of a strong feeling of opposition on the part of the citizens of this city and State. Whether the Baltimore and Ohio is permitted to acquire the Western Maryland or not is of itself relatively unimportant so far as the Baltimore and Ohio is concerned, but it is of prime importance that the Baltimore and Ohio, in any plan of consolidation, should be so strengthened and rounded out that it can compete on a reasonable parity with the other large systems in the same

region, and thus be able to give to Baltimore the same effective support and co-operation which the Northern cities now receive from the Pennsylvania and the New York Central Lines.

"It should be borne in mind that the Pennsylvania and New York Central will be substantially the same after consolidation as now, whether there be four, five or six groups in the Eastern region. With four groups the Baltimore and Ohio will approach the Pennsylvania and New York Central in mileage and opportunity, but not in earnings. With five or more groups the Baltimore and Ohio would be relatively weaker than it is today when compared with the two great systems just mentioned. We are interested in the Western Maryland chiefly as it affects the larger aspect of grouping which I have just been discussing."

Kansas City Southern Expected to Get to New Orleans Over Edenborn's Line.

Expectations that the Kansas City Southern Railway will get into New Orleans by acquiring the lines of the Louisiana Railway and Navigation Company, a theory which has prevailed ever since the death of Wm. Edenborn, president of the latter, have been revived by the recent visit of J. F. Holden, vice-president in charge of traffic on the Kansas City Southern, to the Louisiana metropolis. At present the Gulf outlet of the Kansas City road is at Port Arthur, Texas, but it would be of tremendous advantage to it if New Orleans could also be made a deep water outlet for the line. The Edenborn road crosses the Kansas City Southern at Shreveport, La., 306 miles from New Orleans, extending from there on into Texas to Greenville and McKinney 204 miles west of Shreveport, or 510 miles northwest from New Orleans. The Edenborn line also has a branch in Louisiana to Winnfield, 27½ miles long.

Although officers of the Kansas City Southern Railway do not discuss the subject it is regarded as assured that L. F. Loree, chairman of the board and the leading spirit in the company, is aiming to get to New Orleans via the Edenborn route which lies through Alexandria, La., and that as soon as a plan for a southwestern merger can be prepared, which will be approved by the Interstate Commerce Commission, it will be found to provide the desired entrance for his road into the Crescent City. In the course of an address to the Traffic Club of New Orleans, Mr. Holden referred to the fact that Chairman Loree had announced that a new plan was being prepared to be submitted at Washington, the first suggestions having been disapproved by the Commission, but he said that details of the new plan has not been yet put together. While he was in the city he made a general inspection of its traffic facilities along the water front.

"Birthday" of a Well-Known Train.

The "Pennsylvania Limited" was 46 years old on Saturday, November 19, having been inaugurated November 19, 1881, when Chester A. Arthur was in the White House and Queen Victoria was on the throne of England. The telephone was just being introduced to public use, and the automobile was unheard of. The company says that since its start the "Limited" has never missed a trip, but has been operated, without interruption, seven days in every week, both east and westbound. The company's statisticians estimate that in this period it has carried more than 6,000,000 passengers. In honor of the anniversary, the train when leaving New York at 12.05 P. M. on its birthday carried in its dining-car a mammoth birthday cake with 46 candles. A special dinner was served, including a piece of the birthday cake for each passenger in the dining car. Souvenir menus giving the history of the "Limited," and decorated with a steel engraving of the train were also distributed.

RAILROAD WOULD REPLACE TRAINS WITH MOTOR CARRIERS IN TEXAS.

Application to Be Heard in January First Step of Kind Taken in State—Propose Operating Freight and Passenger Vehicles on 90-Mile Highway Route.

Austin, Texas.—The initial movement on the part of steam railroads in the Southwest to relieve themselves of losses occasioned by the operation of motor vehicles in freight and passenger service was disclosed recently in the application submitted to the State Railroad Commission by the St. Louis Southwestern Railroad for permission to discontinue operation of a number of trains on its line between Tyler and Lufkin, 90 miles, and to substitute motorbus service upon the paralleling highway between the two points. Public hearing of the application was set for January 16, 1928. It will be held at Alto.

Citizens of the section traversed by the line and the Chambers of Commerce in the interested towns are divided on the question. Employees of the railroad are said to have signified their opposition to the pending application, because they see in it a reduction of crews and a loss of work for trainmen.

The commission ultimately will decide whether it will give its approval to the railroads operating motorbus lines as more economical and with more frequent service than either steam or motor transportation on rails. Chairman Gilmore, in granting the postponement, directed attention to the importance of the question and the highly important precedent that is to be fixed. A novel question to be raised at the hearing will come through citation of the statute, which forbids railroads from purchasing paralleling and competing lines. Whether that inhibition extends to other than rail lines or is confined to railroads exclusively will be discussed. It is expected that if the pending application is granted it will mean the general establishment of motorbus service by railroads where highways parallel their lines.

Short Line for a New Texas Oil Field.

Charter of the Texas-New Mexico Railroad Company is reported from Austin, Texas, to build a line 35 miles long from a point near Monahans on the Texas and Pacific Railway, in Ward County, via Kermit, in Winkler county, to the boundary of New Mexico. The line will run through a new and fast developing oil region in Winkler county and its general offices will be at Monahans. G. O. Bateman of Breckenridge, Texas, is president and the other members of the board are residents of Dallas, nearly all of them connected with the Texas and Pacific Railway, as follows: R. S. Shapard, assistant general attorney; R. L. W. Thompson, assistant attorney; A. C. Littlejohn, chief clerk to the president; A. R. Dieterman, chief clerk to the vice-president; L. C. Porter, assistant claim agent; L. T. McIntyre, cashier; C. B. Marshall, clerk; D. Wallace, chief clerk to the assistant general manager, and J. G. Head.

Ward and Winkler counties, Texas, adjoin the southeastern corner of New Mexico at its intersection with the Texas Panhandle region and the general direction of the new railroad will be north and northwest.

The Hunt County Commissioners, Greenville, Texas, have commissioned W. R. Ragsdale of Greenville as architect for the proposed \$400,000 county courthouse for which bonds were recently voted.

GOOD ROADS AND STREETS

Annual Road Show and Convention at Cleveland.

The twenty-fifth convention and road show of the American Road Builders' Association, to be opened in Cleveland January 9, 1928, will be testimony of the progressive change and great development that has taken place in the Association during the past few years.

Years ago the convention, made up almost entirely of engineers, discussed the economy of roads and the best methods of construction; later the convention spoke of maintenance, but not as the important and ever-present problem that it is today. Now, in addition to the latest methods of construction and maintenance, the convention presents the solution of the problem of traffic control and highway operation in the light of most recent developments.

Some years ago equipment manufacturers began exhibiting their products. This proved to be a great advantage, not only to the equipment producers but to the highway engineers, officials and contractors; and it became a regular practice to show road equipment at the Road Builders' Annual Convention. This was the beginning of the Road Show.

During the past few years, due to extended organization, the American Road Builders' Association has come to represent the highway industry—the maker of the highway as represented by the engineer, official, manufacturer and contractor, as well as the user of the highway, as represented by the general public.

At the convention the latest methods of construction, maintenance and operation will be presented by carefully selected authorities. The exposition will afford an opportunity for the engineer, official and contractor to see and compare in a few days the latest types of road equipment and materials as produced by over 300 manufacturers. Opportunity is afforded manufacturers at the road show to present and display the latest in equipment and materials to about 25,000 delegates comprising representatives from every State, as well as many foreign countries.

Thus the road builders' convention has become during the past few years one of the outstanding institutions of highway education and exposition. It is now regarded as the clearing house of latest developments in the highway industry. Entire commissions and boards are attending or sending their staffs, for they clearly see that the information secured, will, in its application to local problems, offset many times during the year any expenses incurred in attending.

The convention will be marked by four significant days. Monday, January 9, will be Manufacturers Day and manufacturers will present their newly developed products to visiting members of their own organizations from different parts of the country, as well as to visiting distributors who are depended upon to carry the new developments of the manufacturers into their local fields.

Tuesday will be Governors' Day. Governor A. V. Donahey of Ohio will be honorary chairman.

Wednesday will be Pan-American Day and the program is given over to special problems of all countries, as well as to the development of closer relations with the Pan-American countries, especially in regard to their highway programs. Dr. E. Gil Borges, assistant director of the Pan-American Union, is chairman.

Thursday is County Highway Officials Day. The newly organized division, under its president, Thomas J. Wasser, will have charge of the program. The county division is functioning through eight standards committees, covering the county highway problems. Papers and reports of these com-

mittees will constitute the program of this day and all activities will be carried on by county officials.

Friday will be given over entirely to the road show, so that engineers, officials and contractors who have devoted their time to listening to the papers at the convention will have an opportunity to inspect and compare the latest developments in equipment and materials.

The program of the convention will be co-ordinated by H. K. Bishop of the Bureau of Public Roads. He will be assisted by Frank Sheets and Fred White in the engineers sessions and S. M. Williams and Gen. R. C. Marshall in the contractors sessions. President T. J. Wasser of the County Highway Officials Division, assisted by vice-president of the division, Charles E. Grubb, will have charge of the program on County Highway Officials Day.

The program will have sessions selected for the interest of engineers and officials and sessions selected for the particular interest of the highway contractors. On County Highway Officials Day the entire program will be of special interest to the country officials.

On Wednesday evening the Road Builders Banquet will be held.

The attendance at the convention and road show has been steadily increasing. Last year 19,000 people registered, denoting an attendance of over 25,000 people. This year stricter registration will be obtained in order to secure the names and permanent addresses of the delegates.

Plan Beautifying Virginia Highways.

Richmond, Va.—Junius P. Fishburn, president of the Virginia State Chamber of Commerce, has just been instructed by the board of directors to name a committee to co-operate with the women's clubs of the State and others interested in the beautification of Virginia highways.

This action was taken on the request of more than a score of prominent citizens throughout the State, including the following presidents of Garden Clubs: Miriam W. Martin of Norfolk, Frances P. Gibson of Leesburg, Mrs. B. P. Thornhill of Lynchburg, Mrs. Walter T. Paxton, Danville; Mrs. Roderick Triplett, Portsmouth; Mrs. J. D. Jones, Chatham; Mrs. Samuel A. Appleton, Warrenton; Mrs. E. M. Hammond, Scottsville; Mrs. William E. Price, Meredithville; Mrs. W. A. Rinehart, Charlottesville; Mrs. Fitzhugh Elder, Staunton; Miss Mary H. Cameron of Gordonsville, and Mrs. Kenneth N. Gilpin, Winchester.

\$5,000,000 Boulevard Under Way at Houston.

Houston, Texas.—Navigation Boulevard, Houston's driveway to the Turning Basin, will involve the expenditure of \$5,000,000, including the cost of bridges, subways, purchase of property, paving, excavating and other necessary work in connection with the road, according to J. C. McVea, city engineer. The city had on hand \$500,000 when the project was started, passed a \$1,800,000 bond issue for roadways and \$575,000 for bridges and obtained \$100,000 from the county, making a total of \$2,975,000. The balance \$2,025,000 will be paid by property owners, it is said.

Texas County Plans 33 Miles of Highway.

San Angelo, Texas.—A petition is being circulated in Sterling county requesting the County Commissioners to call an election on a bond issue for hard surfacing 33.5 miles of highway No. 9 through the county. The section of this road in Sterling county is an important one on the main highway between Amarillo and San Antonio.

\$3,700,000 IN TENNESSEE CONTRACTS. Letting on December 16 Provides for 154 Miles of Roads and 15 Bridges—Many Types of Construction Included.

Nashville, Tenn.—Bids for about 154 miles of highways construction and 15 bridges will be received December 16, estimated to involve the expenditure in the aggregate of \$3,700,000. There are 17 road projects located on important routes throughout the State, and the proposed construction entails many phases of work from grading and drainage to the higher types of surfacing. The road contracts call for the following types of construction: Grading and drainage, 104 miles; cement concrete, 33 miles; asphaltic concrete, 17 miles.

The 10 bridge contracts to be let provide for 15 structures, including the roadways of the Harahan bridge at Memphis, a co-operative project with the city of Memphis, the State of Arkansas and the United States Bureau of Public Roads interested. The bridges will total approximately 1.30 miles. Two bridges authorized by the last legislature are included.

On September 16 the department held the largest letting in the history of the State, the projects entailing a total expenditure of about \$6,000,000. While the cost of the projects to be let December 16 is something more than half of this figure, the roadway mileage to be improved exceeds the figure for the September letting.

Highway Bridge Design Standards.

In line with the program of standardization to eliminate useless waste in various industries, approved by Secretary Herbert Hoover, a conference was held recently at Orange, Texas, for the purpose of inaugurating a definite plan of procedure to work out a standard design for creosoted timber highway bridge construction which would meet all requirements of the State highway departments of Arkansas, Louisiana, Texas and Oklahoma, and the Federal Bureau of Public Roads, for Federal aid projects.

Differences between the designs in use at present in these four States are not great and all the designs are satisfactory to the bureau of public roads and are approved for roads constructed under Federal aid. The purpose of this conference, sponsored by R. S. Manley, president of the Texas Creosoting Company, Orange, and other leaders in the creosoting and lumber-producing fields, was to discuss the possibility of adopting one standard design and basic specifications which would permit the creosoting organizations to carry in stock one particular type of material instead of four, and in this way be in a better position to meet emergency demands.

A definite program of procedure was adopted and a committee was appointed to study and report on suggested standard specifications, with the aim of having these adopted by the highway departments of the four States.

Those present at the conference were:

O. L. Grover, bureau of public roads; G. W. Mayo, Fort Worth, Texas; C. D. Sneed, Montgomery, Ala.; A. C. Love, Beaumont, Texas; George C. Wickline, Texas State Highway Department; N. E. Lant, Louisiana State Highway Department; Herbert Eldredge, Texas State Highway Department, Orange; Walter C. Burnham, Oklahoma State Highway Department, Oklahoma City; N. B. Carver, Arkansas State Highway Department, Little Rock; John Rightmire, Oklahoma State Highway Department, Oklahoma City; Charles M. Kerr, American Wood Preservers Association, Chicago, Ill.; Leo Kraemer, Southern Pine Association, Chicago; R. S. Manley, president, Texas Creosoting Company, Orange; E. E. Boehne, International Creosoting and Construction Company, Galveston; Page Harris, vice-president, National Lumber and Creosoting Company, Houston; William Steen, Long-Bell Lumber Company, Shreveport, La.; R. E. Moore, Long-Bell Lumber Company, Houston; Nolan Hussey, vice-president, Houston

Wood Preserving Company, Houston; F. T. Mayfield, Houston Wood Preserving Company, Houston; H. B. Clay, Southwestern Laboratories, Fort Worth; E. J. Booth, Weir Lumber Company, Weirgate, Texas; J. B. Channing, Litcher and Moore Lumber Company, Orange; E. N. Thompson, Peavy-Moore Lumber Company, Shreveport; William Holbrooke, DeRidder plant, Long-Bell Lumber Company; R. J. Wilson, Peavy-Byrnes Lumber Company, Shreveport; Mr. Jones, Peavy-Moore Lumber Company, Shreveport; Turner T. Wallis, secretary, Chamber of Commerce, Orange.

The party inspected the new Sabine River bridge and were guests of Ed Abbott, sales manager, Brown-Abbott Company, contractors, who recently completed their work on this bridge, at a barbecue held at the bridge site.

Southwest Road Show and School.

The third annual Southwest Road Show and School, to be held under the auspices of the Wichita Thresher and Tractor Club, will be held at the municipal coliseum in Wichita, Kan., on February 21, 22, 23 and 24, 1928. Fourteen or more States are expected to be covered by the Show and given a program of publicity, instead of nine, as was done at prior shows. The coming show, it is said, will be strictly business and educational and arrangements have been made for additional floor space. Many kinds of road building and road maintenance machinery and accessories will be exhibited, the school to embrace instruction on road equipment, location and traffic, traffic studies and highway finance, design and construction, maintenance and commercial materials. F. G. Wieland is manager of the Show and School.

\$3,000,000 Greenville Sewer System Progressing.

Greenville, S. C.—Construction of the major units of the Greater Greenville Sewer System, estimated to involve the expenditure of \$3,000,000, will be completed by next June, according to E. D. Fry, superintendent. Installation of lateral lines will require additional time. A 36-inch line four miles long is being built from the city limits to the disposal plant being erected at cost of over \$520,000. Contractors are placing 21,000 feet of main trunk line.

North Carolina to Award Road Projects Estimated to Cost \$1,700,000.

Raleigh, N. C.—Bids for the construction of 16 highway projects will be received on December 13 by the State Highway Commission. It is estimated that the projects will necessitate the expenditure of \$1,700,000. The projects comprise: 48.51 miles of hard surface roads and 65.29 miles of dirt road and structures, in 15 counties.

\$710,000 Oklahoma Highway Contracts Let.

Oklahoma City, Okla.—The State Highways Commission awarded the contracts recently for 27 projects estimated to entail an expenditure of \$710,000, including five miles of paving, 96 miles of grading and drainage and six small bridges.

\$500,000 Bonds Voted by Kentucky County.

Hazard, Ky.—A bond issue of \$500,000 for building roads in Perry county was recently carried by a 10 to 1 vote. Every precinct in the county except one voted almost unanimously for the issue.

Johnson county, Tennessee, has voted a \$270,000 bond issue to construct the last link in a direct highway from Mountain City to Johnson City, connecting at Elizabethton with the Johnson City-Asheville section of the Appalachian Scenic Highway.

TEXTILE

Spinning Company at Greenville Operating Day and Night.

Greenville, S. C.—The first year of operation under the present management of the American Spinning Company, of this city, has been a successful one, it was declared following the annual stockholders' meeting recently.

A 5 per cent semi-annual dividend, payable December 31, was declared. The company has been operating full time, both night and day, and so far as is indicated now will continue to operate on this schedule.

All officers and directors were re-elected for the coming year. Directors re-elected were A. J. Cumnock, L. B. Malone, S. S. Widger, John E. Sullivan, John E. Pate, of the East, and H. J. Haynesworth, J. E. Sirrine, D. D. Little and Hugh S. Little, of this State.

Officials re-elected were: A. J. Cumnock, president; D. D. Little, vice-president and treasurer; Hugh S. Little, assistant treasurer; W. B. Boyd, secretary.

Hosiery Mills Installing New Equipment.

The Elizabeth City Hosiery Company of Elizabeth City, N. C., is installing new equipment for the production of full-fashioned hosiery, which will largely augment the present output of its mill. The company has purchased four Lieberknecht full-fashioned machines from Alfred Hoffman, Inc., of New York; Universal winders from the Universal Winding Company, Boston; Union special seamers from the Union Special Machine Company, Philadelphia; Sotco loopers from the Southern Textile Machinery Company, Paducah, Ky., and steel equipment from David Lupton's Sons Company, Philadelphia.

The mill is now equipped with 341 latch needle knitting machines, 205 ribbers, sewing machine, dyeing, finishing and bleaching departments for the production of women's seamless and ribbed hosiery, children's hosiery and seamless half-hose.

Chesnee Cotton Mills to Be Enlarged.

Chesnee, S. C.—Plans have been announced for the enlargement of the plant here of the Chesnee Mills by the installation of 10,000 additional spindles, which will increase the capacity about one-third. Lockwood, Greene & Co. of Boston, with offices in Atlanta, Spartanburg and Charlotte, are the engineers. The mill is now equipped with 20,160 spindles and 440 looms for the production of lawns, pongees and alpacas. It is understood that work on the addition will not go forward at this time.

Knitting Mill at Fort Payne, Ala., Completed.

Fort Payne, Ala.—The mill addition for W. B. Davis & Son has been completed and seamless knitting machinery is being installed. The new building located south of the present mill is two-story and basement, 197 by 62 feet, with a floor area of 32,000 square feet. The side walls are of brick pilasters and wide sash areas. J. E. Sirrine & Co., Greenville, S. C., are the engineers.

Kingsport Hosiery Mill Completes Addition.

Kingsport, Tenn.—Full-fashioned hosiery machinery is now being installed at the Kingsport Hosiery Mill. To provide space for this new department, the company has completed a new one-story, daylight constructed building, 86 by 92 feet with monitor roof. Twelve machines will be installed at the start. J. E. Sirrine & Co., Greenville, S. C., are the engineers.

Fitzgerald to Head Cotton Group.

H. R. Fitzgerald of Danville, Va., is scheduled to become president of the American Cotton Manufacturers' Association at the next convention of that organization to be held next May, according to press dispatches from Richmond. Mr. Fitzgerald, now vice-president of the association, will succeed George S. Harris, Jr., of Atlanta, Ga.

To Establish Hosiery Plant in Norfolk.

Regarding the establishment of a branch plant in Norfolk, the Parker Hosiery Mill and Dye Works, Inc., of Portsmouth, Va., advises that the plant will be equipped with knitting machines made by Scott & Williams, Inc., New York, and steady dial loopers made by the Southern Textile Machinery Company of Paducah, Ky. The mill will house a total of about 100 machines for the exclusive production of Parker-Knit school stockings, which are manufactured exclusively in all the company's plants.

5000-Spindle Addition for Chiquola Mill.

Honea Path, S. C.—Work is expected to begin soon on a proposed addition to the mill here of the Chiquola Manufacturing Company, for which contract has recently been awarded to the Gallivan Building Company of Greenville, S. C. The present mill building will be enlarged by an extension 130 feet long by 78.8 feet, four stories, for the accommodation of 5000 additional spindles and necessary preparatory machinery. J. E. Sirrine & Co. of Greenville are the engineers. The present mill is equipped with 41,280 ring spindles and 1000 looms for converting cloths.

\$750,000 Mill for Travelers Rest, S. C.

Greenville, S. C.—Contracts will be let shortly for the \$750,000 plant for the Woodward-Baldwin Company and local interests to be erected at Travelers Rest. A weave shed, dyeing and finishing plant, warehouse, boiler room and 60 houses for operatives are included in the layout. The weave shed will be 138 by 281 feet, one story high. The warehouse will be 150 by 100 feet, divided into three compartments. The details of the steam plant have not been decided upon. The village will be on the Geer Highway, about a mile north of Travelers Rest on the Greenville and Northern Railroad lines.

J. E. Sirrine & Co. are the engineers.

South-Wide Cotton Conference.

As previously mentioned in the MANUFACTURERS RECORD, a Southwide Cotton Conference, under the direction of the American Cotton Association, is to be held at New Orleans, in the St. Charles Hotel, January 11 and 12. The purpose is twofold: First, the creation of a permanent financial system among the cotton States for holding and retiring in the hands of the growers any abnormal surplus of cotton in years of overproduction, until such surplus is needed in legitimate channels of consumption; second, a systematic co-operative unit plan of cotton acreage control, to prevent the planting of excessive acreage in cotton.

It was pointed out by Col. Harvie Jordan, Greenville, S. C., managing director of the American Cotton Association, that experience in marketing spot cotton during the past has demonstrated that the growers have been each year heavily penalized with low prices when large crops of cotton were grown. Colonel Jordan further states that any surplus of raw cotton carried over any year beyond 2,500,000 bales is always used to hammer prices below cost of production.

LUMBER AND BUILDING MATERIALS

Southern Pine Salesmen Meet.

Kansas City, Mo., Nov. 26 [Special].—Architects, contractors and retailers, some representing each of these three callings, were guests of the Kansas City salesmen of Southern pine at their recent meeting at the Muehlbach Hotel. Frank R. Watkins, Exchange Sawmills Sales Co., Kansas City, chairman; Don R. Bodwell, Long-Bell Lumber Co., Kansas City, and John H. Hatcher, Kirby Lumber Co., Kansas City, were the local committee in charge.

The main subject was the recent digest of the lectures delivered at the School for Salesmen in Madison, with J. F. Carter, field representative of the Southern Pine Association, leading the discussion. In starting his talk, Mr. Carter dwelt on the campaign of the National Lumber Manufacturers Association and then he went into a discussion of the density rule and its application, pointing out that the Almighty had grade-marked Southern pine for strength by permitting the growth of the summer-wood. He pointed out that the percentage of summer-wood growth is the more important part of the density rule, instead of the ring count, and explained in detail the tests made at Madison to illustrate his statements.

Samples of Southern pine, both dense and non-dense, were passed among the gathering, each sample marked. Two of these, one dense and one very non-dense, had been carefully made to the same size and weighed, the weight being marked. These were to illustrate the fact that weight of a piece of wood and its strength when compared with another piece of wood of the same size are relative, and almost in arithmetical ratio.

A history of jerry building, the causes for it, and the cure which can be applied, were brought out, the speaker explaining that the additional cost of building well with good lumber is not much more than building poorly with poor lumber. Also, he said that the selling points are in the house and good construction can be made a selling argument for a house better than can a low price for a cheaply-built house. The inspection service of the Southern Pine Association was explained, and the architects and builders were told to what extent the Association goes in giving aid when called upon.

Moisture content, kiln drying and the paintability of Southern pine were introduced to the salesmen, while blue stain was explained at some length, so that the salesmen might understand that blue stain does not affect the strength of a stick of wood, is not a form of rot or the beginning of rot, and is only a defect as to appearance. The insulation value of wood was touched upon.

End-matching attracted considerable attention when cases of its use and the savings were pointed out. Mr. Carter told of the principal of end-matching, and explained that the installation of an end-matching equipment is not closely related to the wood pile, the trash burner or the fire box, but is a refinement in the manufacturing of lumber wherein savings are brought about for the retailer and principally for the contractor and builder.

As his term of office as a committeeman expired with this meeting, Frank R. Watkins was replaced on the committee by E. G. McLean of the Buschow Lumber Co., Kansas City.

Maryland Distributes 50,000 Young Trees.

According to F. W. Besley, Baltimore, State forester, Maryland has distributed about 50,000 young trees for reforestation purposes since the Fall planting opened. These trees, which average two years of age, were grown at the nurseries of the State Forestry Department, at College Park, and were

distributed to people who wish to use them in salvaging waste lands or for roadside planting, being supplied at the approximate cost of producing them. Before the end of the spring planting season it is expected that 350,000 of these young trees will have been disposed of. The department plans to grow at least 750,000 trees next year through a greater nursery area and larger seed supply.

Veneer Plant at Norfolk Operating.

Norfolk, Va.—The first carload of veneer to be manufactured in this section was recently shipped from the plant of the Dixie Veneer Company. The plant is to be devoted exclusively to the production of high grade veneers from foreign and domestic woods. The operations are under the direction of J. T. Spicker. Officers of the company include: John R. Dean, president; Thomas A. Dean, vice-president, and Philip D. Dean, secretary-treasurer.

The Lumber Situation.

The lumber industry last week took the lead over the corresponding week last year, says the National Lumber Manufacturers Association, reviewing reports from 461 of the leading lumber mills of the country. Thirty-six fewer reporting mills had orders in excess of last year's total, and production and shipments were so nearly the same in the reports as to show that for the preceding week there were apparently real increases in all three factors, with statistically evident increase in new business.

The softwood lumber business, aside from a small increase in orders, was about the same last week as the week before, but had a heavy gain in orders over last year.

The hardwood industry is apparently lagging behind last year, especially in shipments. As compared with the preceding week, demand is running about the same, with some shrinkage in production and shipments.

The unfilled orders of 225 Southern Pine and West Coast mills at the end of last week amounted to 553,721,896 feet, as against 422,359,990 feet for 217 mills the previous week. The 106 identical Southern Pine mills in the group showed unfilled orders of 216,375,806 feet last week, as against 214,199,206 feet for the week before. For the 119 West Coast mills the unfilled orders were 340,346,090 feet, as against 208,160,784 feet for 111 mills a week earlier.

What do we plant

When we plant the tree?

What do we plant when we plant the tree?
We plant the ship which will cross the sea,
We plant the mast to carry the sails.
We plant the planks to withstand the gales,
The keel, the keelson, the beam and knee—
We plant the ship when we plant the tree.

What do we plant when we plant the tree?
We plant the house for you and me.
We plant the rafters, the shingles, the floors,
We plant the studding, the lath, the doors,
The beams and siding, all parts that be;
We plant the house when we plant the tree.

What do we plant when we plant the tree?
A thousand things that we daily see.
We plant the spire that out-towers the crag,
We plant the staff for our country's flag,
We plant the shade from the hot sun free;
We plant all these when we plant the tree.

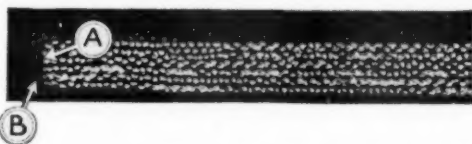
[From Bulletin of North Carolina Pine Association, which gives credit for the poem to John R. Wheeler of Edenton.]

MECHANICAL

Improved Type of Conveyor Belt.

For several years the B. F. Goodrich Rubber Company of Akron, Ohio, have been experimenting with a unique construction for conveyor and elevator belts. This new feature is described commercially as "Highflex" construction. It consists essentially in the elimination of all folds in laying up the fabric, each ply being a separate unit completely insulated from the adjoining plies.

This new construction was developed to meet the needs of modern conveying systems, in which higher speeds and longer



CROSS-SECTION, SHOWING HOW BELT IS MADE.

center distances are rapidly becoming common practice. One of the problems involved in such installations is the maintenance of good contact on the driving pulleys without using excessive tension on the return side of the belt. It is claimed that the increase in flexibility afforded by the foldless construction improves pulley contact to a marked degree, as well as insuring a better distribution of tension between the plies and across the width of the belt.

In one installation of an 8-ply Highflex construction belt more than 2000 feet long it was found possible to operate the conveyor fully loaded without any tension whatsoever on the return side of the belt.

Another important advantage pointed out is the superior edge adhesion. This edge problem has been effectively solved by a bonded edge, in which a heavy edge cushion, continuous with the top cover, is united to the edges of the fabric so securely that nothing short of actual destruction, it is stated, can pull the rubber away from its anchorage.

Gas-Electric Locomotive for Freight and Passenger Service.

The first of the 20-ton double truck series of the Davenport gas-electric industrial locomotives being manufactured by the Davenport Locomotive and Manufacturing Corporation, Davenport, Iowa, will be used by the city of Winnipeg (Canada) Hydro-Electric system. The new engine is similar in



TWENTY-TON GAS-ELECTRIC LOCOMOTIVE.

construction to the 25 and 30 ton models, which are also being built by this company. Frank B. Wyld, superintendent of transportation of the Canadian company, was in Davenport when a trial run for final inspection was made. The flexibility of operation, even distribution of power and speed

of the engine were demonstrated to his entire satisfaction.

Equipment used in building this locomotive was the most modern, such as shutters on radiators, for extreme weather conditions, snow plow, special arrangement of cab, with its lighting, ventilating and hot water heating systems, air sanders, straight and automatic air brakes, power take-off for direct current up to 240 volts, for lighting, heating, cooking, operating electric motors, windlass, pumps, etc.

The locomotive has been built to maintain a schedule of 25 miles per hour over heavy grades and at temperatures varying from 47 degrees Fahrenheit below zero to 110 degrees above.

The city of Winnipeg Hydro-Electric system is a municipally owned company which supplies electrical power direct to the city of Winnipeg and furnishes wholesale power to all portions of the Province of Manitoba.

"We expect to do with this locomotive most of the work that we have been doing with a 75-ton steam locomotive, keeping the large steam locomotive in reserve for any excessive hauling operations," Mr. Wyld said.

The gas-electric locomotive will be used for freight and passenger service from the end of the Canadian Pacific Railroad at Lac du Bonnet through a dense forest for 25½ miles to the power plant on the Winnipeg River, known as Point du Bois. All material and supplies will be hauled in by this engine and the only passenger service in this 25-mile region will be furnished by it.

Right or Left Dump Body for Trucks.

The accompanying illustration shows an ingenious and efficient two-way dump body for motor trucks which is made by the Eagle Wagon Works of Auburn, New York. It will dump on either the right or the left side, is easy to operate and has high clearance, the load being dumped over and beyond the truck rear wheel. It is made in two sizes, one of



VIEW OF BODY IN DUMPING POSITION.

one cubic yard capacity and the other of one and one-half cubic yard capacity. It is designed for the use of road builders for whom the side dump is particularly valuable, but is useful in many kinds of business besides. It can carry brick or crushed stone, pottery and sundry other products. The body is raised easily in one minute's time.

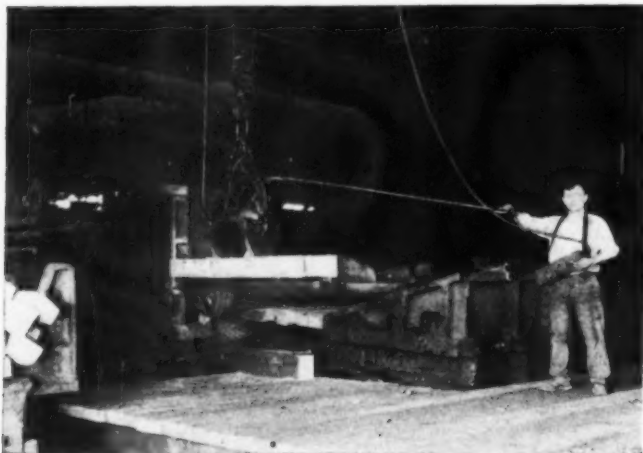
These truck bodies are constructed of hard wood lined with steel of 16 gauge throughout and have an all-steel sub-frame. Control of the dumping feature to cast the load to either the right or the left as may be wished is by means of a heavy duty hand hoist which is able to lift a load of two tons. Both right and left sides of the body are made in the form of a drop gate as shown in the picture, this being hinged at the bottom so as to throw the load over the back wheels. The bottom of the body is sixteen inches above the chassis of the truck. It is stated that there is nothing in the gear of the lifting device that can get out of order. The elevation of the body for dumping is 32 degrees. The measurement of each size body is 96 by 64 inches, but the smaller is only 8 inches deep, the larger being 12 inches deep.

One-Man Outfit for Steel Furnace.

The Phoenix Iron Company, Phoenixville, Pa., have developed a one-man outfit which is so complete that it takes the place of eight men, four on each turn of one of its industrial operations. The electric equipment was furnished by the Electric Controller and Manufacturing Company of Cleveland, Ohio.

In the operation of this outfit one man is the crane operator, the lifting magnet operator and the furnace charger. It consists of an overhead crane 60 feet long, an automatic control board in the power-house, a lifting magnet for handling steel billets and a control box carried by the operator, this being suspended on a strap that passes around his neck. This box has a row of push buttons like notes on an accordion. Also important is a long steel handle from the magnet.

At the center of the building is a continuous heating furnace through which steel billets move slowly as they are heated for the rolling mill. When a hot billet is taken out a cold billet is fed in at the other end, and the job of the one-man outfit is to keep the loading platform filled. A car of



THE ONE-MAN OUTFIT IN USE.

billets from storage is parked at one side of the furnace, and the operator, playing the push buttons on his control box with one hand, uses the other to move the magnet parallel to the length of the billet. Then he drops the magnet, which picks up the billet, and he then swings the load over the platform, dropping the billet in line for the furnace.

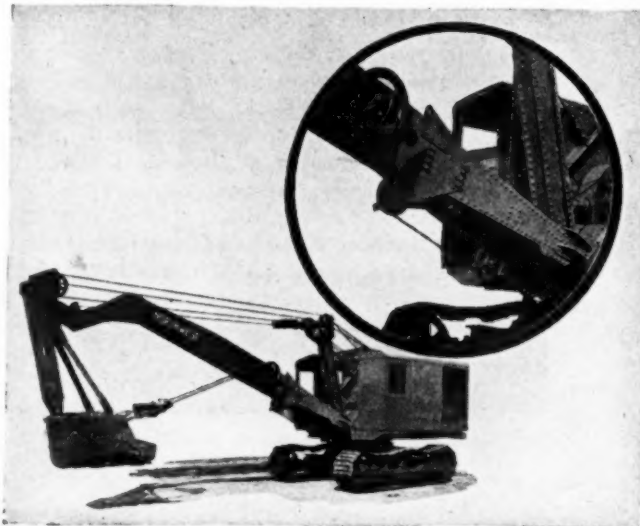
The three-ton Shepard crane is fixed in position above the end of the furnace, but the trolley from which the Electric Controller and Manufacturing Company's lifting magnet is suspended moves across the full length off the 60-foot span. A motor of 2.6 horsepower drives the trolley and a 10 horsepower motor is on the hoist. The crane movements and the magnet are controlled from the control box carried by the operator. The four buttons controlling the crane are momentary contact buttons for safety, providing current only so long as they are pressed.

Pull-Shovel "Crowd" for Hard Digging.

The Northwest Engineering Co., 28 E. Jackson Boulevard, Chicago, one of the largest exclusive builders of gasoline, electric and Diesel powered shovels, cranes and draglines, has added a new crowding arrangement to their pull-shovel. The broad feature of its operation is that of pulling the boom and bucket downward while digging.

It will be remembered by those who have seen the Northwest pull-shovel that the drag cable runs from the drag drum over sheaves on the right hand side of the boom, through the padlock sheave on the dipper, then back on the left hand side

of the boom to the dead-end well above the boom base. By continuing this cable over a sheave at a right angle, then back over another sheave to the dead-end on the boom base,



NEW "CROWD" AND ITS APPLICATION TO PULL-SHOVEL.

a decided downward action on the part of the boom, when the pull on the dipper is strong, has been secured.

The effect of this device is to increase the value of the pull-shovel in hard digging and to increase its ability to handle greater depths.

Commercial Steel Castings.

New orders for steel castings in October, as reported to the Department of Commerce by the principal manufacturers, were 37 per cent of shop capacity, as against 38 per cent in September and 56 per cent a year ago. The production of steel castings was 44 per cent of capacity in October, as against 50 per cent in September and 60 per cent a year ago. The 123 reporting concerns have a present monthly capacity of 133,000 tons and represent over four-fifths of the commercial castings capacity of the United States, of which 60,100 tons are usually devoted to railway specialties and 72,900 tons to miscellaneous castings.

COMMERCIAL STEEL CASTINGS. NEW ORDERS (BOOKINGS)

	Net tons	Per cent of capacity	Railway specialties Net tons	Miscellaneous castings Net tons
1926				
September	67,363	51	22,031	45,332
October	74,680	56	27,827	46,853
Total (10 months)...	838,774	63	316,288	522,486

	Net tons	Per cent of capacity	Railway specialties Net tons	Miscellaneous castings Net tons
1927				
September	50,630	38	15,737	34,893
October	48,762	37	14,029	34,733
Total (10 months)...	733,670	56	290,204	443,466

PRODUCTION.

	Net tons	Per cent of capacity	Railway specialties Net tons	Miscellaneous castings Net tons
1926				
September	79,471	60	22,837	56,634
October	79,804	60	25,737	54,067
Total (10 months)...	926,204	70	350,296	575,908

	Net tons	Per cent of capacity	Railway specialties Net tons	Miscellaneous castings Net tons
1927				
September	67,077	50	19,486	47,591
October	58,694	44	17,257	41,437
Total (10 months)...	806,637	61	300,102	506,535

The Washington School of Medicine, St. Louis, Mo., Dr. W. McKim Marriott, dean, is considering the establishment of a \$1,000,000 neurological institute.

CONSTRUCTION DEPARTMENT

EXPLANATORY

Additional information is published about all enterprises mentioned in this department as soon as such data can be obtained.

The date at the end of an item indicates issue of the Manufacturers Record in which earlier facts about the same enterprise were published.

DAILY BULLETIN

The Daily Bulletin is published every business day to enable its subscribers to follow up promptly the industrial, commercial, railroad, financial, building and general business development of the South and Southwest. To machinery manufacturers and dealers, contractors, engineers and others who require daily information of every new enterprise organized and details about important additions to enterprises already established, the Daily Bulletin is invaluable. Subscription price, \$30.00 a year.

Airports, Airplane Plants, Etc.

Fla., Miami—Hollis Bush, Director, Greater Miami Airport Assn., First Nat. Bank Bldg., advises following regarding aviation development: Have airport for land planes located about 8 miles from center of city, now being equipped with all necessary facilities; seaplane base is being established on the Venetian Causeway; contract let for necessary aprons, paving of beach, supply stations for gasoline, oil, etc.; plans are being developed for permanent municipal airport to care for both land and seaplanes; to develop as international port between West Indies and countries of South America. 11-24

Fla., Miami—Chalmers Airlines, Inc., capital \$10,000, chartered; Royce Chalmers, 1329 S. W. Eighth St., Helen K. Chalmers, Harry Smith. 11-24

Fla., Pensacola—Bureau of Yards and Docks, Navy Dept., erect compass house and pigeon loft, naval air station; receive bids Dec. 14.

Fla., St. Petersburg—City Comsn., reported, receiving bids for construction steel airplane hangar at Piper-Fuller field. 11-10

Fla., Tampa—City Comm., Wallace Davis, Sec., reported, receiving bids for clearing new site of municipal airport; plans erecting new hangars, dismantle buildings at present site and move to new field, grade and construct runways, install gasoline and oil storage tanks, machine shops, etc. 11-10

Ga., Augusta—Finance Committee of City Council receiving bids for lighting system for Daniel Field, soon award contract. 9-22

Ga., Augusta—R. W. Mitchum, reported, awarded contract for erection hangar at Daniel Field, brick, metal doors, metal roof, capacity 6 large or 8 small planes.

La., Crowley—City, P. S. Pugh, Jr., Mayor, reported, interested in establishing landing field.

N. C., Elizabeth City—City interested in establishing airport, probably locate on old Bayside Estate. Address City Clerk.

S. C., Blacksburg—J. H. Polk, Engr. of Dept. of Commerce, Div. of Airways, reported, completed surveys for landing field preparatory to installation of cables, lighting, etc.; beacon light will be 3,000,000 candlepower revolving, lighthouse type, mounted on 75-ft. steel tower; contract awarded; all necessary equipment purchased. 9-29

S. C., Gaffney—City soon award contracts for lighting municipal airport; plans installing beacon tower 52 ft. high, 2,000,000 candlepower, revolving light in Gaffney Field; white ground lights will surround field 300 ft. apart; complete mapping of field by J. H. Polk, Engr. of Airways Div., Dept. of Commerce.

Tenn., Chattanooga—Plans have been formulated by Commr. James A. Cash for sub-leasing municipal aviation field to private individuals for commercial purposes.

Tex., Tyler—City interested in establishing airport. Address City Clerk.

Tex., Wichita Falls—Joe Carrigan, Staley Bldg., member of Airport Committee of Chamber of Commerce, interested in forming airport company.

Va., Richmond—Following are bidders for installation of 19 rotating electric searchlight beacons along section of New York-Atlanta airway between Richmond and Greensboro: Muhleman & Kayhoe, Inc., 1224 Greycourt Ave., Richmond, Va.; Harrison-Wright Co., Charlotte, N. C.; Henry E. Bittger, Pleasant Gap, Pa.; Squares Electric Co., Kansas City, and Wm. E. Arthur & Co., Inc., 103 Park Ave., New York.

W. Va., Glendale—Industrial Land and Building Co., Wheeling, capital \$300,000, incorporated; W. P. Wilson, Lee C. Paull,

Thomas Carnahan; reported, will furnish site and buildings for Fokker Aircraft Corp., 110 E. Forty-second St., New York City, for manufacture of Fokker monoplane. R. W. Nelson, Sec., Ohio Valley Industrial Corp., Wheeling, wires: "Fokker Aircraft Corp. of America will establish aircraft manufacturing plant at Glendale, W. Va., near Wheeling. The Industrial Land and Building Corp. will construct building containing about 3 acres floor space and lease same to Fokker Corp.; construction to start in near future; C. W. Bates, Archt., Wheeling; when running full time it is estimated plant will employ 1,000 persons. 11-17

W. Va., Parkersburg—City interested in establishing municipal airport. Address City Clerk.

Bridges, Culverts and Viaducts

Proposed Construction

Fla., Boca Raton—War Dept., Washington, D. C., approved plans of Palm Beach County for concrete bridge across East Coast Canal at Boca Raton; County Comms., West Palm Beach, plan receiving bids for bridge; approximate cost \$70,000; Jake Boyd, County Engr.

Ga., Jesup—State Highway Dept., East Point, lets contract Dec. 21 for bridge across Altamaha River, near Doctortown, on Oglethorpe Highway, Route No. 38; John N. Holder, Chmn. 11-27

La., Alexandria—Rapides Parish Police Jury plans bridge at Boyce on Pershing Highway, Route 144. See Financial News—Bond Issues Proposed.

Md., Cumberland—City, Mayor Koon and Baltimore & Ohio R. R., A. H. Lane, Ch. Engr., Baltimore, considering concrete bridge over tracks on Cumberland St.; Mayor Koon and Western Maryland Ry., H. R. Pratt, Ch. Engr., Baltimore, considering concrete or steel bridge over tracks on Market St.

Miss., Aberdeen—Monroe County Board of Suprvs. requested permit from War Dept., Washington, D. C., to build concrete bridge across Tombigbee River near Aberdeen; State Highway Comm., Jackson, allocated \$75,000 for bridge, being part of U. S. Highway No. 45.

Miss., Aberdeen—Monroe County Board of Suprvs. receives bids Dec. 5 for concrete bridge on Lenoir road, Fourth Dist.; plans from J. T. Morgan, Clk.

Miss., Vicksburg—Harry E. Bovay, 1743 N. Parkway, Memphis, Tenn., may receive bids in Dec. for bridge over Mississippi River at Vicksburg; Harrington, Howard & Ash, Engrs., 1012 Baltimore Ave., Kansas City.

Missouri—State Highway Dept. receives bids for 19 bridges. See Roads, Streets, Paving.

Mo., Bagnell—War Dept., Washington, D. C., reported, approved plans of Alfred L. McCawley, 501 N. Central St., Carthage, Mo., for bridge over Osage River, Bagnell. 8-18

Mo., St. Joseph—Louis V. Stigall, Mayor, advises engineer has not been selected for bridge over Mississippi River. 11-17

North Carolina—See Roads, Streets, Paving.

N. C., Wilmington—Federal Government, Maj. W. A. Snow, Dist. Engr., plans bridge, with draw span, of about 80-ft. clearance, on Carolina Beach Highway at point where inland waterway extension will divide road; Addison Hewlett, Chmn., Board of New Hanover County Comms.

Okla., Holdenville—City plans building bridge over South Canadian River; probably concrete and steel, 11 mi. south of Holdenville and 1½ mi. north of Allen. Address W. R. McNeil, Sec. Chamber of Commerce.

Okla., Ponca City—City, H. C. Mulroy, Mayor, plans Santa Fe Ry. underpass at South Ave.; two 18-ft. roadways, each one-way drive, concrete center supports; approximate cost \$200,000. See Financial News—Bond Issues Proposed. 11-17

Okla., Vinita—Craig County Comms., J. V. Roberts, Commr., considering bridge across Grand River south of Ketchum near junction of Mayes, Delaware and Craig Counties.

South Carolina—State Highway Comm. receives bids for 11 bridges. See Roads, Streets, Paving.

Tennessee—Dept. of Highways and Public Works receives bids for 38 bridges. See Roads, Streets, Paving.

Tenn., Perryville—Dept. of Highways and Public Works, C. N. Bass, Ch. Highway Commr., Nashville, considering bridge across Tennessee River at Perryville; Lewis H. Watkins, Dist. Engr., in charge of river improvement in Tennessee.

Texas—See Roads, Streets, Paving.

Tex., Bellville—State Highway Comm. receives bids for bridges. See Roads, Streets, Paving.

Tex., Brenham—State Highway Comm., R. S. Sterling, Chmn., Austin, receives bids Jan. 6 for Chappel Hill Bridge over Brazos River on Austin-Houston Road, near Brenham, Washington County; Sam Dowe, County Judge; R. A. Thompson, State Highway Engr. 11-2

Tex., Dickens—Dickens County plans 2 bridges. See Roads, Streets, Paving.

Tex., Galveston—Galveston County Comms. Court plans bridge across Clear Creek, at Kemah, about 175 ft. downstream from Southern Pacific R. R. Bridge, wooden pile trestle, with opening for boats over deepest part of channel, having horizontal clearance of 40 ft., and vertical clearance of 20 ft., mean low tide; opening to be in line with opening in Southern Pacific draw bridge; hearing will be held Dec. 6 by Lieut.-Col. Julian L. Schley, U. S. Dist. Elgr. 7-14

Tex., Houston—City, George Woods, Mgr., and Southern Pacific Co., G. E. Boschke, Ch. Engr., San Francisco, Cal., plan \$11,000 60-ft. iron trestle over Buffalo Bayou; replace wooden structure on Buffalo Drive; J. C. McVea, Engr.

Tex., Johnson City—See Roads, Streets, Paving.

Tex., Tilden—See Roads, Streets, Paving.

Contracts Awarded

Ga., Augusta—E. M. Williams, Monroe, Ga., reported, has general contract for bridge over Savannah River, at Purey's Ferry, 15 mi. above Augusta; 1,200 ft. reinforced concrete approaches, reinforced concrete piers for three 200-ft. steel truss spans across river; Austin Bros. Bridge Co., 1195 Mickleberry St., S. W., Atlanta, has contract for superstructure of bridge. 9-15

La., Melville—Texas & Pacific Ry. Co., E. F. Mitchell, Ch. Engr., Dallas, Tex., reported, let contract to Mississippi Valley Bridge & Iron Co., Leavenworth, Kansas, for bridge over Atchafalaya River, Melville; M. L. Wagner, in charge of work. 11-3

Miss., Merrill—George County Bridge Co., Inc., J. C. Dorsett, Pres., reported, let contract to Austin Bridge Co., Dallas, at \$125,000 for steel and concrete toll bridge over Pascagoula River at Merrill.

Mo., Springfield—City, W. E. Freeman, Mayor, let contract to M. E. Gillioz, Monett, Mo., for second approach to Benton Ave. viaduct. 11-24

Mo., Quitman—Standard Bridge Co., Omaha, Neb., has contract for 100-ft. high truss steel bridge southwest of Quitman, 14-ft. roadway on steel piling.

Canning and Packing Plants

Fla., St. Petersburg—H. E. DuMetz, 2046 S. Sixteenth St., plans to build and equip pure food plant, canning industry and refrigeration system. See Want Section—Machinery and Supplies.

Tex., Troup—Chamber of Commerce, reported, interested in establishing canning plant in connection with cotton gin plant.

Clayworking Plants

Ky., Olive Hill—Burchett-Holmes Clay Works, incorporated; Ernest Burchett, Jonas Holmes, Edward Burchett.

Coal Mines and Coke Ovens

Va., Tacoma—Kelley Coal Corp., chartered; G. W. Kelley, Clay Kelley, both Tacoma; E. C. Banner, Coeburn.

Concrete and Cement Plants

Fla., Ocala—Chas. S. Thompson, 320 Walnut St., Philadelphia, Pa., and associates negotiating with Cowham Engineering Co., Chicago, Ill., for survey of 1740 acres land for possible development cement plant.

Tex., Aransas Pass—Will J. Tucker, Fred Robertson, Los Angeles, Cal., and Coy Burnett, San Diego, reported, construct and operate cement plant, making use of mud shells.

Cotton Compress and Gins

Tex., Donna—Donna Gin, reported, will rebuild plant recently destroyed by fire.

Tex., Galveston—Cotton Concentration Co., James Garrison, V.-P., reported, plans expending \$70,000 for 2 additional sections to its Broadway plant; will increase capacity to 35,000 bales.

Tex., San Antonio—W. K. Ewing Co., Inc., Travis Bldg., offering \$50,000 6% first closed mortgage serial gold bonds for San Antonio Compress Co.

Drainage, Dredging and Irrigation

Florida—Maj. Gen. Harry Taylor, Washington, D. C., reported, will be engineer for Florida State Canal Comm.; prepare report for proposed Georgia and Florida Inland Waterway; proposed canal extends from Cumberland Sound, Georgia and Florida, across northern portion of Florida to Mississippi River.

Miss., Holly Springs—Plans under way for formation new drainage district to be known as Pigeon Roost Creek Drainage Dist., embracing 15,680 acres, of which 8360 acres are in Marshall County, 1360 acres in Tate County and 5960 acres in DeSoto County; J. T. Wade, Marshall County Clerk.

Tex., Eagle Pass—State Board of Water Engrs., San Antonio, reported, made surveys for proposed irrigation system in valley of Rio Grande, reclaiming 60,000 acres; estimated cost \$4,750,000; irrigation district to be created and bonds issued; W. L. Rockwell, Engr. See Financial News—Bond Issues Proposed.

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Ala., Birmingham—Alabama Public Service Comsn., Montgomery, reported, granted petition of Alabama Power Co., Gulf Electric Co., Mobile, and Houston Power Co., Newton, for authority to issue \$40,000,000 of 5% bonds in connection with carrying out agreement under which the 3 companies were recently consolidated under name of Alabama Power Co.; portion of bonds will be used in refunding \$21,000,000 of 6½% bonds outstanding, and other outstanding securities will also be retired and all obligations for construction up to Dec. 31 will be paid; bond issue will provide about \$3,000,000 for future construction. 11-10

Ark., Gravette—City, reported, considering voting on sale of municipal lighting plant to Benton County Utilities Corp., subsidiary of Empire District Co., Joplin, Mo., which has been negotiating for the purchase for several months.

Fla., Frostproof—Florida Public Service Co., Orlando, reported, extending electric lines to Silver Lake district.

Fla., Pensacola—Gulf Power Co., 40 S.

Palafox St., reported, extend lighting system to Ferry Bass community.

Ga., Helena—Georgia Power Co., Atlanta, reported, rebuilding local distribution system, setting new poles, stringing new wire and enlarging transformers.

Ky., Benton—Federal Utilities Co., Chicago, reported, acquired municipal light and power company.

La., Monroe—City, D. A. Breard, Commr. of Finance and Utilities, reported, install \$135,000 additional equipment at power plant; double capacity.

Miss., Bay St. Louis—Mississippi Power Co., Gulfport, reported, construct 22,000 volt transmission line and a 600 kw. substation to serve city from steam generating plant at Gulfport.

Miss., Houston—Mississippi Power Co., Gulfport, reported, to build high powered line to Houston, Pontotoc and Ackerman.

Miss., Prentiss—See Water Works.

Mississippi—Mississippi Power and Light Co., H. C. Couch, Pres., Jackson, subsidiary of Electric Power and Light Corp., are offering \$9,000,000 first mortgage gold bonds, 5% series due 1957, through W. C. Langley & Co., John Nickerson & Co., Guaranty Co. of New York, Old Colony Corp., J. G. White & Co., all New York, and Rogers Caldwell & Co., Inc., Nashville, Tenn.; Mississippi Power and Light Co. supplies electric power and light service to 93 communities, including Jackson, Vicksburg, Greenville, Brookhaven and Grenada, located in agricultural, industrial and lumbering regions in northern and southern sections of western Mississippi. In addition the company owns all the capital stock of Mississippi Central Power Co., which supplies electric power and light service in McComb, Magnolia and Summit; 21 of the communities supplied with electric power and light service are county seats; company also operates electric railway systems in Jackson, Vicksburg and Greenville, supplies gas service in Jackson and water service in Hazlehurst, Osyka, Wesson and Raymond, owns ice manufacturing plants in Greenwood, Brookhaven, Indianola and 3 other communities, etc.

Mo., Jefferson City—McClellan & Junkerfeld, 68 Trinity Place, New York City, has contract for rebuilding part of old plant and erecting new plant, for Missouri Power and Light Co., 228 Madison St., to be 70x60 ft., steel and concrete construction with brick walls; cost \$50,000; will install one 500-kw. turbo generator, one 3000-kw. steam turbo generator with auxiliary; General Electric Co., Schenectady, N. Y., Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa., and Worthington Pump and Machinery Corp., 115 Broadway, New York, will furnish equipment; Superior Structural Steel Co., 5100 Farlin Ave., St. Louis, has contract for steel and erection. 11-24

Mo., St. Joseph—Board of Public Works, receives bids Dec. 5 for whitewash lighting system. See Want Section—Bids Asked.

N. C., Marshall—Northwest Carolina Utilities Co., reported, purchased all interests of Madison Power and Light Co. in Madison County; line to Mars Hill and Walnut and other lines included in transaction and will be operated by new company; branch office and supply to be opened in a few days.

Oklahoma—Lincoln Power Co., David Reid, Pres., Howe, has under construction power plant on Poteau River between Howe and Wister; capacity 5,000 kw., divided into 2 units of 2500 each; general contractors are L. E. Myers Co., Monadnock Bldg., Chicago, Ill.; all of electrical apparatus, including condensers, furnished by Westinghouse Electric & Mfg. Co.; boilers of Edgemoor type; other material entering into construction in charge of contractors; fuel for plant is mined on property; power generated at plant under contract to Oklahoma Gas & Electric Co., H. M. Byllesby Engineering & Management Co., Chicago. 11-17

Okl., Kendrick—Kendrick Electric Co., reported, has electric franchise.

Okl., Oklahoma City—City, reported, will construct white way on Grand Ave. from Broadway to Walker Ave. Address The Mayor.

Tenn., Manchester—City, reported, granted franchise to Southern Cities Power Co., L. P. Harris, Local Mgr., to furnish city electricity for next 30 years; construction work on transmission line to this city has already begun.

Tenn., Trezevant—J. H. Byrd of New York, representing Kentucky-Tennessee Light and Power Co., 61 Broadway, New York, reported, considering purchase of light plant.

Tex., Cookeville—City, reported, plans constructing 1000 h.p. addition to hydro-electric plant, impounding reservoir and concrete dam; cost \$200,000; J. A. Switzer, Engr., Knoxville.

Tex., Fort Worth—City, C. A. Winder, Supervisor of Public Utilities, reported, interested in white way lighting for Page St. and College Ave.

Tex., Goldthwaite—Texas-Louisiana Light and Power Co., Fort Worth Club Bldg., Fort Worth, reported, acquired light and ice plant; plans extensive improvements.

Tex., San Antonio—City, reported, will install approximately 5 miles of white way lights. Address City Clerk.

Tex., San Marcos—City, J. R. Wilhelm, Mayor, will construct white way around Courthouse Plaza; columns to be of cast iron, 15 ft. in height.

Va., Norfolk—Virginia Electric and Power Co., Richmond, reported, considering taking over entire lighting system, installing improved equipment.

Va., Roanoke—Appalachian Power Co., Bluefield, W. Va., will expend \$15,000 for repairs to power house, south side of Walnut Ave.

Flour, Feed and Meal Mills

Miss., McComb—McComb Milling Co., capital \$10,000, incorporated; O. W. Allen, R. L. Allen, K. B. Alford.

Tex., Big Springs—R. G. Simmons of Sweetwater Cotton Oil Co., reported, erect warehouse, feed mill and thrasher; Jim Black, Mgr.

Foundry and Machine Plants

Ky., Owensboro—Cliff Machine Co., R. E. Birnie, Mgr., Louisville, Ky., reported, leased site on Leitchfield Rd., establish plant for repairing engines, drillers' tools, etc.

Mo., Joplin—Rogers Foundry & Manufacturing Co., C. B. Rogers, Pres., 11th and Pearl Sts., and United Iron Works, L. T. Lebow, Vice-Pres., 14th and Joplin Sts., reported, will be consolidated into \$1,000,000 corporation. Rogers Iron Works Co., successors to Rogers Foundry and Mfg. Co., and Joplin plant of United Iron Works, Inc.; no new construction planned at present; manufacture mining machinery for lead and zinc mines, deep-well pumps, etc.

Tex., Galveston—Acme Machine Co., Inc., Pier "A", W. J. Mead, Pres., manufacture double seated valve (patented) also do marine machine work; install equipment. See Want Section—Machinery and Supplies.

Tex., Harrisburg—R. A. Horne, 6506 Canal St., reported, acquired the Marine Iron Works, Sycamore and Water St., both Houston.

Gas and Oil Enterprises

Ala., Tusculumbia—City, reported, granted gas franchise to L. P. Kleitz, Florence.

Ark., Camden—Ouachita Natural Gas Co., Monroe, La., reported, acquired 6-in. gas line of Houston Oil Co. of Texas, Houston, Tex., from Smackover to refinery at White City; company has under construction 16-in. line from Monroe gas fields to El Dorado and is negotiating for 8-in. line between El Dorado and Smackover; Bracy Benson, Supt.

Ky., Franklin—Franklin Gas Co., 110 Washington St., will lay about 8 miles of main line. See Want Section—Machinery and Supplies.

La., Baton Rouge—Baton Rouge Electric Co., reported, will start laying gas distribution system in Fairfields; cost \$30,000.

La., New Orleans—New Orleans Public Service, Inc., reported, has signed contract with Southern Gas and Fuel Co., whereby that concern will extend its gas pipe line from Destrehan to upper city limits of New Orleans, and deliver up to 25,000,000 cu. ft. of gas per day; Public Service proposes to spend \$1,047,000 within a few months for new system of high-pressure gas mains for exclusive distribution of natural gas to industrial plants, to its own central power station and to the gas factory, where natural gas will be used for fuel and for enrichment of artificial gas; pipe line to city limits will be completed about Feb. 1.

La., Opelousas—Belchle and Laskey, Inc., Shreveport, reported, applied for franchise to furnish natural or artificial gas.

La., Shreveport—Fuji Oil Co., capital \$12,500, incorporated; S. C. Fullilove, F. L. Duke.

La., Shreveport—Shreveport-El Dorado Pipe Line Co., Commercial Bank Bldg., reported, acquired 667,000 shares of Shreveport Producing and Refining Company stock.

Mo., St. Joseph—Cities Service Co., 60 Wall St., New York, reported, authorized the expenditure of \$1,000,000 for construction of pipe line from Leavenworth, Kan., to St. Joseph.

Okl., Maud—Magnolia Petroleum Co., Magnolia Bldg., Dallas, reported, construct-

ing 8-in. gas line from gas fields southwest of Maud to Wewoka and Earlsboro.

Okl., Tulsa—Atlas Royalty Co., 502 Mid-Continent Bldg., incorporated; W. E. Brown, Mid-Continent Bldg.; George A. Simon, 1907 Riverside Dr.

Tenn., Chattanooga—Volunteer Oil and Refining Corp., capital \$50,000, incorporated; S. E. Nelson, 526 Pine St.; W. A. Price, 2405 Kirby Ave.; W. A. Ray, 3217 Ave. G.

Texas—Mudd & Wisam and associates, Oklahoma City, Okla., reported, purchased Coons & Hotchkiss properties in Graham Dist., Young County; buyers will organize company to operate holdings.

Tex., Abilene—Huony Gas Co. increased capital, \$25,000 to \$125,000.

Tex., Amarillo—Dawson Oil Co. incorporated; Byron D. Dawson, B. L. Morgan, R. C. McCay.

Tex., Big Spring—E. H. Hornaday, reported, has franchise to furnish gas here and will construct 17 miles pipe line from gas field in Howard County; also construct distributing system.

Tex., Borger—Dixon Creek Oil Co., reported, rebuild burned plant.

Tex., Bryan—Community Natural Gas Co., Lone Star Gas Bldg., Dallas, reported, soon begin construction of pipe line.

Tex., Cooleidge—Lone Star Gas Co., 1915 Wood St., Dallas, reported, will lay mains to supply city with natural gas.

Tex., Cushing—Shell Pipe Line Co., affiliated with Roxana Petroleum Co., both Shell Bldg., St. Louis, Mo., reported, construct 600 mi. 10-in. line from Cushing to McCamey; 70,000 tons of new pipe will be used to build main trunk.

Tex., Dallas—Texas Pacific Coal and Oil Co., reported, construct warehouse and tank facilities at Harrison Ave. and Coombs St.

Tex., Dallas—Southern Oil and Production Co. incorporated; J. W. Carpenter, Joe A. Worsham, both Interurban Bldg.

Tex., Dallas—Texas Pacific Coal and Oil Co., Thurber, Texas, reported, purchased tract at Harrison Ave. and Coombs St.; will construct tank facilities and warehouse for distributing plant.

Tex., Dawson—Community Natural Gas Co., Lone Star Gas Bldg., Dallas, reported, laying gas pipes to supply natural gas.

Tex., El Paso—Frank Pickrell, 3721 Chester St., reported, negotiating for franchise to supply natural gas and construct pipe line from Kermit fields to El Paso, 220 miles; cost \$5,000,000.

Tex., Houston—Humble Pipe Line Co., Humble Bldg., increased capital, \$24,000,000 to \$50,000,000.

Tex., Houston—Marathon Oil Co. incorporated; A. F. Eggel, C. K. Patterson.

Tex., Midland—James Contracting Co., Waggoner Bldg., Wichita Falls, has contract covering approximately 80 miles of 10-in. welded line for Atlantic Oil Producing Co., Dallas; contract covers welding, painting and ditching; welding contract has been sublet to Meador & Whitaker, Burkburnett.

Va., Norfolk—Norfolk Petroleum Co., Inc., capital \$10,000, incorporated; R. D. Kruger, 310 Market St., A. Turock, 750 Brewer St., C. H. Fine.

Va., Portsmouth—Tidewater Oil Co., capital \$25,000, incorporated; L. G. White, Park Ave.; Walter H. Stroud, 1047 Anne St.

Ice and Cold-Storage Plants

Fla., Panama City—Panama Ice and Fish Co., reported, plans expending \$50,000 to remodel plant, double capacity.

Fla., Sanford—Florida Cold Storage Co., capital \$1,250,000, incorporated; M. O. Overstreet, 206 E. Central Ave., Orlando; E. A. Douglass, Sanford; C. W. Entzminger, Longwood, and others; reported, plans constructing cold storage at both Sanford and Orlando; cost of each about \$400,000.

Fla., St. Petersburg—See Canning and Packing Plants.

Ky., Ashland—Ashland Ice Co., capital \$30,000, incorporated; H. B. Dugan, N. G. Calvert, A. N. Richardson.

La., Gibsland—Tooke & Reynolds, Arcadia, La., reported, plans establishing 6 ton daily capacity ice plant.

La., Gibsland—Edwin Winlock, reported, plans establishing ice and cold storage plant, daily capacity 12 tons.

N. C., Statesville—Statesville Ice Co., recently incorporated, capital \$100,000, plans erecting new ice plant.

Tex., Dallas—Arctic Ice Co. changed name to Standard Ice Co.; increased capital, \$40,000 to \$140,000.

Tex., Brownsville—Central Power & Light Co., Frost Natl. Bank Bldg., San Antonio, reported, construct \$250,000 ice and cold storage plant on Southern Pacific R. R.; initial capacity about 40 tons daily; Frank C. Luden, Dist. Mgr., San Benito.

Tex., Edcouch—Valley Electric & Ice Co., reported, erect 1-story, 50x130-ft. ice plant, brick, concrete and steel, cost \$27,000; John Marriott, Archt., Frost Bldg., San Antonio.

Tex., Taylor—Dixie Ice Co., reported, plans erecting ice and cold storage plant.

Va., Portsmouth—Virginia Ice Utilities Corp., 120 Broadway, chartered; R. P. Stevens, H. W. Billingsley, both New York; F. W. Beazley, Hatton St., Portsmouth.

Iron and Steel Plants

Mo., North Kansas City, Br., Kansas City—Standard Steel Works, P. G. Walton, Pres., 16th and Holmes Sts., reported, acquired adjacent site, 305x115 ft., erect 1-story, brick and concrete, factory type building, double plant's capacity. Company recently absorbed the Sheet Metal Products Co.; Raymond Burton, V-Pres., Standard Steel Works, advises: Are building addition to present plant, increasing floor space practically 50 per cent; entire plant when finished will be 610x125 ft.; construction work and plans by company; all construction materials are purchased direct; work started and probably completed some time in February.

Land Development

Ark., Dermott—Delta Pecan Co., W. T. Willum, Pres., reported, will develop 1700 acres for pecan orchards. 11-24

Ark., Fort Smith—Will J. Scott, 516 May St.; C. N. Geren, Green Bldg.; Oscar Fentress and associates, reported, interested in developing cemetery on 80-acre tract on Grand Ave. east of Waldron Rd.

Ark., Heafner—C. B. and Warren Moore, reported, acquired 320-acre plantation at Crittenden County.

Ark., Little Rock—Union Securities Co., Union Trust Bldg., capital \$125,000, incorporated; Sam W. Reyburn, A. G. Kahn; colonize Arkansas plantations.

Fla., Delray—Burd, Inc., capital \$25,000, incorporated; S. E. Burd, L. J. Burd.

Fla., Jacksonville—Skinner Brothers Realty Co., incorporated; R. G. Skinner, 3455 Pine St.; A. C. Skinner, 470 Avondale Ave.

Fla., Jacksonville—Jax Building Realty Co., capital \$25,000, incorporated; J. M. Bass, J. A. Campbell, 230 Hogan St.; A. B. Porter.

Fla., Jacksonville—Lapinsky Realty Co. incorporated; Jacob Lapinsky, 408 W. Forsyth St.

Fla., Jacksonville—Surrey Co. incorporated; R. C. Teunon, N. D. Suttles, 380 W. Forsyth St.

Fla., Miami—All States Realty Corp., incorporated; H. F. Ward, 1311 Alhambra Circle, T. J. Lummus.

Fla., Miami—Christobal Holding Co., Inc., chartered; H. V. Whitehurst, Meyer-Kiser Bldg.; W. C. Clutter.

Fla., Miami—Freemont Holding Co., Inc., incorporated; H. J. Freeman, 448 N. E. 27th St.; H. B. Montgomery.

Fla., Miami—Smith Realty Co., Inc., capital \$10,000, incorporated; N. C. Smith, S. Cochran, C. G. Smith.

Fla., Miami—Franklin C. Bush, Inc., incorporated; H. F. Ward, 1311 Alhambra Circle, T. J. Munnus.

Fla., Orlando—O. P. Swope, Inc., capital \$500,000, incorporated; C. P. Swope, E. M. Swope.

Fla., Orlando—Mid-Florida Co., incorporated; W. H. Reynolds, 450 S. Orange St., Francis Couillard.

Fla., Orlando—The Hannum Co., capital \$50,000, incorporated; F. W. Hannum, M. M. Hannum.

Fla., St. Petersburg—Kolograph International Distribution Corp., incorporated; M. J. Burnside, Frank Arnold.

Fla., Sarasota—Central Avenue Holding Corp., capital \$10,000, incorporated; Homer Howard, Commercial Ct.; Gladys M. Howard.

Fla., Sebring—Sebring Groves Corp. incorporated; B. F. Connor, H. C. Connor.

Fla., Tampa—River-Bluff Subdivision, Inc., chartered; H. T. Bullard, W. E. Swanson, P. H. Hodge.

Fla., Tampa—Bel-Mar Corp., incorporated; M. W. Lloyd, 304 Water St.; H. S. Mott, 3016 Chapin Ave.

Fla., West Palm Beach—Thirty-fifth Street Corp., incorporated; J. L. Chapman,

321 Greymoor Dr.; H. Van Metre, First American Bank Bldg.

Ky., Louisville—City, reported, develop recreational facilities, playgrounds and parks. See Financial News—Bond Issues Proposed.

Md., Baltimore—Century Corp., 306 N. Charles St., incorporated; George S. Awalt, Morris Bldg.; A. Grant Kinner.

Md., Baltimore—Atlantic Holding Co., 206 E. Lexington St., incorporated; John W. Mentzer, Louis Croner.

Md., Baltimore—Union Cemetery Co., 10 E. Lexington St., incorporated; Wm. Sidney, Gustave Glocker.

Miss., Kosciusko—Walter Elkin Co., Inc., incorporated; W. E. Walker, Mrs. W. E. Walker, Joe R. Elkin.

Miss., McComb—Lake Shore Development Co., capital \$10,000, incorporated; E. G. Williams, C. E. McMaster, W. R. Caston.

Mo., Kansas City—Squier Manor Development Co., incorporated; Wesley O. Nater, Agnes M. Crenshaw, George L. Walker, Englewood Sta.

Mo., St. Louis—Wardell Lands, Inc., capital \$50,000, incorporated; A. M. Frumberg, Bank of Commerce Bldg.; E. W. Floristel, Title Guarantee Bldg.; A. Sloan Oliver, 7824 Grove St.

N. C., Black Mountain—Millard Avenue Corp., capital \$50,000, incorporated; A. A. Hegeman, R. E. Finch, L. P. Cummings.

S. C., Anderson—Oconee Farms, Inc., incorporated; R. E. Ligon, A. M. McFall, C. S. Sullivan.

S. C., Anderson—W. H. Harrison, reported, interested in development of subdivision on W. Market St.

Tex., Brownsville—Edelstein Realty Corp., capital \$75,000, incorporated; M. Edelstein, Mrs. Yetta Edelstein, Paul V. Springman.

Tex., Brownsville—Bayside Development Co. incorporated; C. R. Tyrrell, L. P. Brady.

Tex., Fort Worth—City, reported, plans expending \$250,000 for park improvements; Morris Beney, Pres. Park Board; may vote on bonds.

Tex., Houston—Sunset Court Realty Co., J. H. Rafferty, Pres., 406 Marine Bank Bldg., will expend \$40,000, for developing 20 acres for residential area; Theo. Keller, Landscape Archt., 407 Marine Bank Bldg. 11-24

Tex., Houston—J. W. Hazard of First National Bank, reported, acquired large tract of land on Lyons Ave.; will develop residential subdivision.

Tex., San Antonio—El Sid Irrigated Farms, capital \$50,000, incorporated; M. C. Abrahams, W. B. Bass, 2434 Wyoming St.; Mrs. Maynie A. Abrahams.

Tex., San Antonio—Laward Land Co., capital \$225,000, incorporated; B. C. Luca, H. C. Feldman, C. E. Tolhurst, 133 Armour St.

Tex., San Benito—Lions Club, Harry Barsch, Pres., reported, interested in constructing municipal golf course.

Tex., Vanderbilt—Benview Development Co., capital \$10,000, incorporated; Henry Onderj, F. L. Tiller, R. J. Stepan.

Va., Bristol—Model Land Corp., capital \$20,000, incorporated; W. D. Fuller, Norton; H. L. Fuller.

Va., Hopewell—Virginia Realities Corp., capital \$15,000, incorporated; A. Rosenbaum, 2610 Washington Ave., Newport News; L. W. Bartlett, J. D. Van Pelt, both of Hopewell.

Va., Norfolk—Wardman Construction Co., 1437 K St. N. W., Washington, reported, plans purchasing 175 acres of the Sunrise Development Construction Co.; property adjoining southern limits of Virginia Beach.

Va., Norfolk—Board of Directors of Pennsylvanian Corp. authorized W. B. Shafer, Jr., Pres. and Gen. Mgr. to issue \$250,000 first mortgage bond issue and offer same for sale at price to net 8% to investor; funds to be used in paying off indebtedness and putting in several miles of macadam streets, sidewalks, etc.

Lumber Enterprises

Ala., Bolling—Ralph Lumber Co., Laurel, Miss., moving saw mill, etc., to Bolling, operation of plant to begin about Jan. 1.

Arkansas—Dierks Lumber and Coal Co., Herbert Dierks, Mgr. Manufacturing Dept., 1006 Grand Ave., Kansas City, Mo., advises: "Making plans and starting on construction work for double band pine sawmill plant; complete with all necessary dry kilns, planing mill and lumber shed buildings; engineering and construction work handled by company's force; machinery and equipment will be purchased by Herbert Dierks, Kansas City. 12-30-26

Fla., Tampa—Sanders Lumber Co., capital

\$25,000, incorporated; J. L. Sanders, 3512 21st Ave.; F. J. Guinan.

La., Vidalia—Clayton Timber Co., Inc., capital \$100,000, chartered; Edw. V. French, Winchester, Mass.; M. B. Reed, Brookline, Mass.

Tex., Big Springs—Cicero Smith Lumber Co., reported, purchased Berry Lumber Co., T. E. Johnson, Mgr.

Mining

Ark., Arkadelphia—A. D. Mason of El Dorado, reported, negotiating for permit to establish gravel plant on west bank Ouachita River, expend about \$25,000 to \$30,000.

Tex., Alpine—Altuda Mining Co., capital \$20,000, incorporated; James A. Fant, Tom L. Wade, Cecil H. Smith.

Miscellaneous Construction

Ala., Selma—Wharf, etc.—R. M. Watters, City Clerk, advises, construction of wharf and warehouse only under consideration, investigation as to cost and kind of structure needed has been authorized; construction not definitely decided.

Fla., West Palm Beach—Palm Beach County Comms., reported, plans constructing 1,000-feet of creosoted timber bulkhead to protect Ocean Blvd. at point south of South Lake Worth Inlet bridge; has \$25,000 available; Jake Boyd, County Engr. 9-8

La., New Orleans—Docks, etc.—Port Comms., 200 New Court House Bldg., reported, construct concrete wharf, dock, shed foundations, fire walls, facade, ramps and paving for Poydras St. and Girod St. wharves; Poydras St. wharf 840x300 ft. and Girod St. wharf 530x250 ft.; receive bids Dec. 6; plans with Supvr. of Purchases, 500 Camp St. 8-18

La., Pointe-a-la-Hache—Levee—State Board of Engrs., 213 New Orleans Court Bldg., New Orleans, received low bid from E. W. Gravellet, Pointe-a-la-Hache, for levee work on the Harlem, Plaquemines Parish; approximate contents 18,000 cu. yds. 11-3

Miss., Clarksdale—Yazoo-Mississippi Delta Levee Board, reported, soon receive bids for construction pumping plant for drainage system at McKinley Lake; cost \$46,000; W. L. Head, Ch. Engr. 8-18

Okl., Oklahoma City—State Highway Comsn. let contract for river protection in 4 counties: Garvin County, \$642.75, and Woods County, \$671.25, to Kellner Jetties Co., Silver Lake, Kan.; Canadian County, \$950, and Jackson County, \$1800, to Concrete and Steel Jetty Co., Topeka, Kan. 10-20

Okl., Oklahoma City—B. M. Hart, City Engr., advises following in connection with building proposed retention reservoir on North Canadian River: Sites have been surveyed and will be given consideration when definite plans are undertaken to be made for flood control in North Canadian River running through Oklahoma City; however, no definite plans will be made until after next session of Congress.

W. Va., Wheeling—Gateway—Park Comsn., Otto Schnek, Chrmn., reported, plans building ornamental gateways for both automobile and pedestrian entrances at Wheeling Municipal Park, erect ornamental fountain, etc., all included in proposed improvements for park; Edward Bates Franzheim, Archt., 1425 Chapline St.; A. Donald Gray, Landscape Archt., 8120 Euclid Ave., Cleveland, Ohio.

Miscellaneous Enterprises

Ala., Birmingham—A. H. Cathen Publishing Co., 419½ N. Twenty-first St., reported, acquired 50x135-ft. site at N. Ninth Ave. and Nineteenth St.; erect building, Duntile cement block walls, brick front, plate glass; total cost about \$80,000.

Ala., Mobile—Food Supplies—Dorgan-Phillips Sales Co., Inc., 62 St. Louis St., capital \$10,000, chartered; A. P. Dorgan, Jr., J. B. McPhillips, J. A. McPhillips.

Ala., Sheffield—Rubber Company of America, capital \$100,000, formed by E. H. Fowler, J. M. Carter, and associates of Detroit, Mich., reported, started construction first unit of plant to manufacture rubber tile in 64 colors or combinations; 40x300-ft., brick, steel frame, concrete floors, four-ply composition asphalt roof; machinery ordered; J. M. Carter, Gen. Supt. of construction, Albert H. Fowler Contr., Mr. Frahn, Archt., Muscle Shoals; machinery furnished by Stewart Bolling & Co. E. L. McKim, Pres.; Albert H. Fowler, Treas. 2-10-27

Ark., Pine Bluff—William Koberlein, 1604 Elm St., reported, acquired site 210-12 Walnut St., erect 2-story bakery building, brick and concrete, white stucco front, install

modern machinery; E. C. Royse Construction Co., Contr., Citizens Bank Bldg.

Ark., Rogers—George Bagby, O. G. Bagby, Earl Bellmer, Sedalia, Mo., reported, leased building, will establish egg hatchery, install incubator with capacity for hatching 42,000 chicks at one time; equipment ordered; Earl Bellmer, local Mgr.

D. C., Washington—Dist. Comms., reported, have specifications and plans for additional traffic lights to be installed on certain streets; new signals will be in 13 synchronized systems, in addition to which 21 single intersections isolate lights will be placed; cost about \$270,000; open bids in about 10 days; plans obtainable at Purchasing Office, Municipal Bldg.; W. H. Harlans, Director of Traffic.

Fla., Clearwater—Mercantile—Sun-I-Fruit Sales Corp., incorporated; T. H. Skinner, L. E. Fesmire.

Fla., Daytona Beach—Meats—Crystal Market, Inc., incorporated; Geo. Linzmayer, M. E. Tracy, N. F. Tracy.

Fla., Ft. Lauderdale—Fort Lauderdale Battery and Electric Co., Inc., chartered; L. M. Phillips, O. C. Morrison, M. E. Phillips.

Fla., Jacksonville—Wy-Do-Wake Syrup Co., capital \$20,000, incorporated; P. S. Harner, H. M. Mabry, Bisbee Bldg., G. L. Small.

Fla., Jacksonville—Kilgore Seed Co., incorporated; W. H. Reynolds, Francis Couillard.

Fla., Jacksonville—Arnot Baking Co., 401 E. Third St., incorporated; J. B. Arnot, Alex P. Arnot.

Fla., Miami—South Florida School Supply Co., incorporated; W. J. Carlson, R. G. Reeves.

Fla., Miami—Harvey C. Wheeler, Boston, Mass., reported, acquired towel supply business of Miami Laundry, Riverside Linen and The Service Towel Supply; will combine plants and establish towel supply business; has office in 870 cities in United States; also in Canada, France, Australia and South America; also let contract to A. C. Grimm Co., 736 S. W. Sixth St., to manufacture special type of towel cabinet to be installed in all offices of customers.

Fla., Miami—Sea Foods—Islamorada Lobster Co., capital \$15,000, incorporated; J. W. Hammond, J. F. Hammond, J. A. Postan.

Fla., Miami—Radio Distributors, Inc., capital \$25,000, chartered; H. Z. Erzinger, G. M. Phelps, Jr., Charles Butterfoss.

Fla., Milton—Harrison-Estes Construction Co., capital \$25,000, incorporated; W. W. Harrison, Francis Harrison, J. E. Estes.

Fla., Miami—Eustace G. Watts, 1024 S. W. Ninth St., plans organizing company to manufacture peanut butter, extracts, salad dressing, etc., will purchase supplies and equipment. See Want Section—Machinery and Supplies; Miscellaneous.

Fla., Miami Shores—Morgan Construction Co., incorporated; Earle Morgan, F. C. Morgan.

Fla., Miami—Guy H. Robinson Electrical Compliance Co., incorporated; G. H. Robinson, 104 N. E. 40th St.; F. M. Reid.

Fla., Miami—H. L. C. Holding Corp. incorporated; S. S. Spencer, H. C. Crawford, Jr.

Fla., Miami—United Shoe Stores Co., incorporated; Harry L. Stone, I. W. Hummer.

Fla., Ocala—Creamery and Cold Storage—Southland Creamery Co., Osceola and May St., let contract to E. S. Frash, Ocala Highlands, for erection plant addition, 62x62-ft., tile walls, stucco finish, concrete floors, composition roof, install 3 storage sections and vestibule, 20x22; 12x22; 2x22; 7½x14, respectively, and 20 ton compressor furnished by G. W. Mathews Co., Orlando. 11-24

Fla., Orlando—Avalon Pharmacy, Inc., incorporated; H. L. Haight, 117 E. Concord St.; E. R. Haight, 1644 E. Livingston St.

Fla., Pensacola—Naval Stores—The Newport Co., J. H. McCormack, Gen. Mgr., W. Main St., reported, plans expending \$225,000 on extensions in addition to partially completed \$400,000 improvements which are now under way; installing additional machinery and equipment. 2-10-27

Fla., Port Orange—Sea Foods—South Atlantic Fisheries, Inc., incorporated; A. H. Ramos, Dodge Taylor.

Fla., Sanford—Sanford Publishers, Inc., capital \$25,000, incorporated; M. B. Hutton, W. H. Berry.

Fla., St. Petersburg—Southern Packing Corp. incorporated; E. L. Nelson, J. S. Rossbach.

Fla., Tallahassee—Leon County Milk Co. incorporated; L. W. Scott, G. E. Lewis, J. G. Kellum.

Fla., Tampa—Tampa Floral Co., Inc., capital \$55,000, chartered; A. C. Luther, 2706

Jetton Ave., J. E. Burk, 409 Cass St., Nellie M. Luther.

Fla., West Palm Beach—Alma Hotel Operating Co., incorporated; C. J. Meerdink, 534 Dativa St., Lucretia Meerdink, A. M. Lopez, 818 Washington St.

Ga., Brunswick—Lake Wales Naval Stores, Lake Wales, Fla., C. C. Gillican, Pres. (subsidiary of Gillican-Chipley Co.), reported, moved headquarters to Brunswick.

Ga., Macon—Rogers-Mulberry Street Grocery Co., capital \$50,000, incorporated; T. B. Hutchinson, C. Cook, 209 Lincoln St.

Ga., Macon—Lowe Electric Corp., 131 Cotton Ave., capital \$20,000, incorporated; Henry E. Lowe, Mrs. May M. Lowe; formerly operated under name of H. E. Lowe Electric Co.

Ga., Macon—Insecticides—Growers' Service & Supply Co., capital \$50,000, incorporated; C. B. Clay, 365 Cherokee Ave.; Dr. S. F. Howell, Macon; Geo. F. Thompson, Middleport, N. Y.

Ky., Louisville—Grayson Springs Hotel Co., capital \$10,000, incorporated; James E. Perry, 325 Kenwood Way; Julian R. Fisher, 201 Crescent Ct.; C. Houston McGrew, M. E. Taylor Bldg.

Ky., Louisville—G.-N.-K. Furnace Co., incorporated; Leonard H. Goss, 1650 Richmond St.; Geo. C. Nevin, John J. King, 831 S. 38th St.

Ky., Louisville—Merchandise—Pike & Co., Inc., capital \$10,000, chartered; Marion I. Kreiger, Leslie E. Hagan, Lawrence S. Kreiger.

Ky., Louisville—Southern System and Reinforcing Co., incorporated; N. C. Terrell, J. B. Van Meter, H. P. Headley.

Ky., Newport—Kentucky Laundry Co. increased capital, \$30,000 to \$85,500.

La., Kaplan—Alexon Bonnin, C. J. Montgomery and associates, reported, plans organizing \$150,000 company to establish rice mill, proposed structure 4-story, concrete, steel and brick, install latest improved machinery; J. W. Embry, Engr., Crowley.

La., New Orleans—Uncle Peter's Food Palace, Inc., chartered \$10,000, chartered; Peter Trocchiano, 3228 S. Carrollton St., Frank Trocchiano.

La., Shreveport—General Manufacturing—The Sox Manufacturing Co., capital \$25,000, incorporated; E. C. Montgomery, 926 Unadilla St., A. C. Williamson, 620 Merrick St.

La., Shreveport—Dixie Creameries, Inc., C. Ford, Pres. and Gen. Mgr., 2419 Southern St., reported, acquired entire business and property of Star Creamery Co., Inc., 3516 Mansfield Rd.; company now owns 16 plants located in Louisiana and Arkansas. 11-24

Md., Baltimore—National Dairy Products Co. Inc., 101 E. Fayette St., chartered; R. Dorsey Watkins, Huntington Cairnes, both Calvert Bldg.; Leslie E. Mihm, 12 Elmwood Ave.

Md., Baltimore—Bakery Products—Hillman-Hyde Cookie Co., 501 E. Preston St., capital \$20,000; Louis Hillman, Wm. Hittleman, 3417 Holmes Ave.; Geo. F. Hyle.

Md., Baltimore—Paints, etc.—Southern Industrial Lacquer Co., Clarkson and Winder St., capital \$50,000, incorporated; Richard E. Preece, R. E. Lee Young, Wm. M. Travers, all 3 E. Lexington St.

Md., Baltimore—Union Cigar Co., 101 E. Fayette St., incorporated; Ferdinand H. Butehorn, Frank C. Taylor, Cornelius J. Ferrie.

Md., Baltimore—Modern Engineering Co., 107 E. Pleasant St., capital \$50,000, incorporated; Wm. F. Kirwan, J. Warner Pyles, Geo. M. Brady, Fidelity Bldg.

Md., Baltimore—Special Electrical Box Co., 310 N. Holliday St., incorporated; Albert M. Doty, Wm. Gislrel, Edgar B. Cahn, 2316 Mt. Royal Ave.

Md., Baltimore—Printing, etc.—International Institute of Commerce, Inc., Old Town Bank Bldg., capital \$200,000, chartered; Sidnev O. Boartfield, J. Clyde Hyatt, 3907 Marmon Ave.; John Noll, Jr., 2904 Erdman Ave.

Md., Baltimore—Temptation and Calamity Fish Bait Co., Citizens National Bank Bldg., capital \$26,000, incorporated; Charles B. Baker, Robert Wiesenfeld, L. Edwin Goldman.

Md., Baltimore—Plumbing—James Ross, Inc., 1170 Sargeant St., chartered; James Ross, Mary E. Ross, Sigmund Kallinsky, Calvert Bldg.

Md., Baltimore—Park Board. William I. Norris, Pres., reported, proposes purchasing 320-acre Fort Howard reservation; develop as a waterfront park.

Md., Catonsville—Catonsville Theater Corp., Frederick Ave. and Hill Top Rd., capital

\$100,000, chartered; Adolph C. Brueckmann, Arthur P. Peterson, Henry S. Ashman.

Md., Cumberland—Tri-State Engineering Co., Liberty Trust Bldg., capital \$100,000, chartered; Burton C. Colt, Brenner R. Beckner, Clairborne M. James.

Md., Rock Hall—The Rock Hall Volunteer Fire Co. Inc., chartered; Harry R. Price, T. Leonard Rich, Wm. C. Frances.

Miss., Greenville—Lamar Watson, Box 410, plans establishing plant to manufacture composition shingles, wants data and prices on equipment. See Want Section—Machinery and Supplies.

Miss., Gulfport—Beckleheimer & Small, reported, has contract for 1-story, 50x100-ft. on Twenty-fourth Ave. for The Dixie Press and Gulf Coast Guide; Spanish mission type, stucco, tile roof; electric wiring, The Standard Electric Co.; roofing, Hamilton Bros.; Shrouds & Ben, Archts., Bank of Gulfport Bldg.

Miss., Hattiesburg—Heidelberg Paint Co., capital \$15,000, incorporated; M. A. Heidelberg, P. L. Heidelberg, 22nd Ave.; R. L. Morgan.

Miss., Houston—C. E. Davis, Sec., Exchange Club of Houston, advises following concerning cheese plant to be established: This plant is one of five that the Kraft Cheese Co., 402 Rush St., Chicago, Ill., is establishing in the South, four in Mississippi and one in Tennessee; will provide market for whole milk, with capacity up to 200,000 lbs. daily; investment, counting building and machinery, will be about \$100,000; probably open for operation by March 1, 1928. 11-17

Miss., Jackson—McGee-Wetmore Construction Co., 105 N. Lamar St., capital \$20,000, incorporated; W. J. McGee, Sr., W. J. McGee, Jr., W. J. Wetmore.

Mo., Cardwell—Merchandise—Rosenthal-Loeb Co. incorporated; J. B. Hale, J. F. Miller, R. W. Waldrop.

Mo., East Kansas City—Winnwood Amusement Co., incorporated; Geo. W. Osborne, East Kansas City; R. H. Moore, 433 W. 67th St., Cale B. Fox, Moscow Station, both North Kansas City.

Mo., Kansas City—The F.P.-D. Novelty Corp., Inc., chartered; Hugh C. Foster, Adolph Pucker, 2122 E. 31st St., V. H. Dyer.

Mo., Kansas City—Waste Material—Alexander Wayne Co., First and Oak Sts., incorporated; Alexander Wayne, Carolyn Wayne, Geo. Halpern.

Mo., Kansas City—Posters, etc.—Home Show Printing House, Joseph B. Chapman, Owner, 705 McGee St., reported, acquired building 1640-42 Central St., remodel for printing plant.

Mo., Neosho—White City Dairy, Inc., capital \$50,000, chartered; Ellen Clay, John Bushner, Chas. Clay.

Mo., North Kansas City, Br. Kansas City—Wachman Welded Ware Co. of St. Louis, reported, erect new factory, 300-ft. long, brick; manufacture steel barrels.

Mo., Poplar Bluff—Coca-Cola Bottling Works, J. J. Owen, Pres., reported, plans building \$45,000 bottling plant, brick.

Mo., St. Louis—Central Engineering and Sales Co., capital \$28,604, incorporated; Emilie R. Uhri, Wm. E. Uhri, H. A. Uhri, all 3 Hampton Pike.

Mo., St. Louis—Non-Craze Tile Corp., capital \$200,000, chartered; Herbert D. Leland, Wm. H. Baker, Chas. J. Baker.

Mo., St. Louis—Wolf-Tober Shoe Mfg. Co., 2511 Sullivan Ave., erect \$40,000 plant addition, 2-story and basement, 52x100 ft., concrete, maple over concrete floor, install \$20,000 equipment; work by sub-contracts under supervision of David R. Harrison, Archt., Ambassador Bldg.; manufacture women's shoes; daily output 2500 pairs. 11-24

Mo., St. Louis—Contracting—Wills Construction Co., capital \$10,000, chartered; G. Kendall Wills, 6029 Clemens St.; Ethel J. Wills, Herman Ehlig, 5208 Moffitt St.

Mo., St. Louis—Soap—Procter & Gamble Co., Gwynne Bldg., Cincinnati, Ohio, reported, purchased the William Walke & Co.'s plant at Second St. and E. Grand Ave., covers about 10 acres.

Mo., Unionville—Paul Bebermeyer, and associates, reported, plan establishing creamery.

N. C., Asheville—Arthur Ross and associate will erect plant on Salisbury St., for Brame's Chemical Co., by day labor; purchased brick from O. E. Rich; roofing, J. S. Wiley, Ramsuer, N. C.; millwork and lumber from Home Building, Inc.; hardware from Asheville Hardware Co. 11-24

N. C., Asheville—Stafford Department Store, capital \$10,000, incorporated; Prim Millikin,

T. A. Burns, both Asheville; Edward S. Marshall, 17 W. 30th St., New York.

N. C., Asheville—Mercantile—Stafford Department Store, capital \$10,000, incorporated; Edward S. Marshall, Prim Millikin, T. A. Burns.

N. C., Asheville—Southeastern Express Co., reported, acquired building, 396 Southside Ave., move offices to new site, also utilize for garage.

N. C., Charlotte—Brit-Kin Publishing Co., capital \$50,000, incorporated; Harry Templeton, S. E. Rhyne, Fred Conrad, Kinney Bldg.

N. C., Charlotte—Electric Supply and Equipment Co., 421 W. Penman St., has contract to install 17 new automatic traffic lights; Robert L. Brown, Commr. Public Works.

N. C., Charlotte—Air Reduction Co., 342 Madison Ave., New York City, reported, acquired oxygen manufacturing plant of the Carolina Standard Gas Manufacturing Co., increase facilities; manufactures and distributes compressed oxygen, acetylene gas and carbide gas.

N. C., Raleigh—Mercantile—National Home Pride Stores, capital \$400,000, incorporated; J. C. Benjamin, Jerome Rosenthal, Buford R. Stone.

N. C., Reidsville—Fiske-Carter Construction Co., Masonic Temple Bldg., has contract for erecting cigarette factory of American Tobacco Co.; J. E. Sirrine & Co., Engrs., Greenville, S. C.

N. C., Statesville—Prevette-Wilson Manufacturing Co., capital \$125,000, incorporated; J. R. Prevette, H. A. Wilson, Frank Deaton; manufacture "Previlco" illuminated sign for automobile doors.

N. C., Winston-Salem—Paschal Mirror Co., capital \$100,000, incorporated; W. J. Paschal, H. G. Paschal, Stella Farrow Paschal.

Okla., Oklahoma City—Cain Coffee Co., Inc., Wm. Morgan Cain, Pres., reported, started construction new plant at 512 W. Second St., 3-story and basement, 50x130-ft., reinforced concrete; handling capacity about 1400 lbs. per hour, probably be increased; cost \$50,000; to be ready for occupancy about Jan. 1, 1928. 11-17

Okla., Tulsa—C. J. Patterson Corp., 4050 Penn St., Kansas City, Mo., reported, has permit for bakery on E. Eleventh St., construct plant on unit system; cost approximately \$75,000; Rex Pinson will operate plant.

Tenn., Knoxville—Dixie Syrup Co., incorporated; J. L. Hansard, 308 Randolph St.; Thomas F. Johnson, J. M. Day, 1422 W. Central Ave.

Tenn., Knoxville—Dime Lunch Co., capital \$10,000, incorporated; L. F. Underwood, Edythe Cox, C. P. Redmon, General Bldg.

Tenn., McMinnville—John W. High Funeral Co. increased capital \$10,000 to \$15,000.

Tenn., Memphis—Dunbar Transfer Co., incorporated; John A. Costigan, 46 E. Norwood St., B. W. Barfield, 358 N. McNeill St., Irvin Clement, Exchange Bldg.

Tenn., Nashville—Sweeney Ambulance Service of Nashville, incorporated; Letty Sweeney, 207 Woodland St., Claude Dunn, A. J. Sanders, 220 Capitol Bldg.

Tenn., Paris—Richard H. Rhodes, Frank B. McNeil and associates, interested in organizing company to manufacture patent medicine to be known as "Dr. Sloan's Overnight Antiseptic," erect building to serve as laboratory and warehouse.

Tenn., Paris—Charles M. Jones, reported, erecting building corner Washington and Brewer St., 58x120-ft., brick; contract let; portion of building leased to Paris Baking Co.

Tex., Abilene—Abilene Printing and Stationery Co., reported, let contract for 2 buildings, one 50x100-ft. on Hickory St. and one 25x100-ft. on N. Second St. in rear of present structure, will be occupied by printing and manufacturing departments of company.

Tex., Coleman—R. B. Red, establishing creamery and ice cream factory; machinery and equipment purchased; R. I. Bowen erecting building. 11-24

Tex., Corpus Christi—L. J. Ashmore Paint Co., 514 Peoples St., reported, let contract to J. W. Birmingham, 624 Mesquite St., for erection plant addition, 2-story and basement, reinforced concrete and tile.

Tex., Dallas—Coloreote Plaster Co., capital \$25,000, incorporated; Dr. L. E. Warner, 2516 Thomas St.; Mrs. E. K. Wellfare, Mrs. J. E. Burkholder.

Tex., Dallas—American Body Co., 5113 E. Grant St., increased capital, \$60,000 to \$86,550.

Tex., Galveston—Shoe Polish, etc.—Real Shine Co., Inc., 1106 A St., increased capital, \$35,450 to \$36,700.

Tex., Galveston—Texas Nail and Wire Manufacturing Co., capital \$500,000, incorporated; K. Tideman, Guaranty Bldg., Bartlett D. Moore, 3112 O St., Chas. S. Peek, 3101 J St., reported, building plant on 2-acre site located behind Piers Nos. 16 and 18; manufacture bright, galvanized and barbed wire, nails, staples, etc.; employ about 150 persons; plant to be completed in Jan., 1928.

Tex., Houston—Clarence George, City Electrician, asks appropriation of \$40,000 for new equipment for traffic lights and \$25,000 for extensions to fire alarm system. Address City Clerk.

Tex., Houston—Burke Building Co., incorporated; E. J. Burke, First Natl. Bank Bldg.; J. L. Ramonsky, A. C. Bayless, Post-Dispatch Bldg.

Tex., Lubbock—Clarence Saunders Store of Lubbock, capital \$10,000, incorporated; A. C. Hendricks, Clement Hendricks, O. A. Goodart.

Tex., Manchester—Fruit Dispatch Co., I. K. Ward, Pres., 17 Battery Pl., New York City, subsidiary of United Fruit Co., may extend steamship service to port of Houston.

Tex., Orange—Ralph H. Miller Interests, reported, plans establishing plant to manufacture statuary articles, acquired property corner Green Ave. and Fourth St.; two factories in Memphis will be combined and moved to new site; George W. Oliver, direct work of locating new factory.

Tex., Pharr—Rio Grande Valley Canning Co., capital \$15,000, incorporated; C. R. Lowrie, Lee Akin, Mrs. O. H. Province.

Tex., San Antonio—Clothing—A. W. Fuesel, 1903 Virginia Blvd., has contract for erection of plant, electric lighting and plumbing for plant of Bell Manufacturing Co. Inc., 140 Lakeview Ave.; contract for heating and power system to be awarded; has equipment. 11-17

Tex., Schulenberg—Southern Produce Co., increased capital, \$6,000 to \$22,000.

Tex., Sherman—Sherman Bread Co., 106 N. Crockett St., let contract to J. F. Morgan, for 45x75-ft. building, all equipment contracted for; daily output 2000 loaves bread; John Tulloch, Archt. 11-10

Tex., Waco—The Waco Garment Manufacturing Co., 116½ N. Fourth St., increased capital, \$10,000 to \$25,000.

Tex., Yorktown—Yorktown Creamery, Inc., J. C. Laney, Pres., let contract to Mr. Goelke for erection 50x50-ft. building, brick and concrete, cost about \$15,000; install \$8,000 equipment; to be completed about Jan. 1, 1928. 11-24

Va., Norfolk—Land Plaster—Charles W. Priddy & Co. Inc., Flat Iron Bldg., enlarging factory at Money Point, Norfolk County, has building and foundation for new machinery will be laid within 2 weeks time, install most modern machinery for grinding gypsum rock, cost about \$40,000 to \$50,000; output 500 tons daily; employ 50 to 75 persons to operate plant. Chas. W. Priddy, Pres., Chas. W. Priddy & Co., Inc., advises are moving land plaster mill from present location at Portsmouth to our fertilizer plant at Money Point; will be no enlargement to buildings and no new building, small quantity of additional machinery has been purchased.

Va., Norfolk—Arthur Hale, W. T. Coe and associates, filed petition to Shipping Board to establish line of ships to operate out of Hampton Roads to provide service in export coal trade.

Va., Norfolk—Planters Manufacturing Co., Inc., Willis W. Hargraves, Pres., Maryland Ave., increased capital, \$150,000 to \$500,000.

Va., Norfolk—Norfolk Apartment Corp., capital \$25,000, incorporated; H. E. Kerlin, Norchester and Victoria Ave.; W. M. Boff, Seaboard Bank Bldg.; E. E. Weddle, 271 Bank St.

Va., Norfolk—Newport Theater, Inc., capital \$25,000, chartered; W. S. Wilder, 1304 Mallory Ct.; A. B. Wilder, R. W. Pollock.

Va., Roanoke—Crockett Mineral Springs Co., Inc., capital \$50,000, chartered; J. C. Martin, G. A. Wingfield, Curtis Simpson, all Boxley Bldg.

Va., Roanoke—Pocahontas Cafe, Inc., Kirk Ave., chartered; J. E. Hayes, I. L. Merritt, J. F. Hayes, 720 Denniston Ave., Virginia Heights.

Va., Roanoke—Van R. H. Sternbergh of the Lee-Jackson Caverns, Inc., Washington, D. C., reported, purchased Dixie Cavern, will change name to Roanoke Cavern, plans improvements, erecting pavilion, etc.

Va., Roanoke—Jewelry—Henebry & Son, Inc., 209 S. Jefferson St., increased capital, \$50,000 to \$100,000.

W. Va., Huntington—Guyan Creamery Co., 517 Bridge St., plans building plant addition.

W. Va., Wheeling—J. R. Greenlee Co., Belaire, Ohio, reported, acquired plant of the Northwood Glass Co.; will remodel, install modern machinery, manufacture lighting fixtures, quality and novelty glassware; J. H. Fenton, Gen. Mgr.; S. E. Waddell, office Mgr. of plant.

Motor Bus Lines and Terminals

Fla., St. Petersburg—R. E. Ludwig, Director Public Utilities, reported, plans extension municipal bus lines to serve Clearview Ave., Disston Blvd. to Fifth Ave., etc.

Mo., Cape Girardeau—Southeast Missouri Transit Co., L. V. Hill, Mgr., reported, has permit to operate motor buses from Cape Girardeau to St. Louis and Sikeston, also to Dexter and intermediate points.

Mo., Kansas City—Detroit-Chicago Motor Bus Co., known as the Ni-Sun lines, reported, applied for permit to operate motor bus line between Kansas City and St. Louis, Mo.

N. C., Beaufort—Carolina Transportation Co. applied for permit to extend lines to Morehead City.

Tenn., Knoxville—Knoxville Power and Light Co., reported, propose motor bus service on Sevierville Pike, also from N. Gay and W. Fifth Ave. via Holston St. into Beaumont section; Otto Roehl, City Mgr.

Tex., Dallas—Missouri-Kansas-Texas R. R. Co., F. Ringer, Ch. Engr., St. Louis, Mo., advises, "The M-K-T Lines are not now negotiating for bus line franchise for service from Dallas to San Antonio via Austin and Waco." 11-24

Tex., Tyler—Tyler Chamber of Commerce, reported, endorsed proposal of St. Louis, Southwestern Ry. Co. (Cotton Belt Ry.). W. S. Hanley, Ch. Engr., to substitute motor bus service in place of train service on 92 mi. Lufkin branch.

Va., Grundy—Stacy Bus Line, A. C. Stacy, Mgr., Blackey, Va., operates bus line between Grundy and Jaeger, W. Va. 9-8

Motor Cars, Garages, Filling Stations

D. C., Washington—Washington Gas Light Co., S. McIlhenny, 413 Tenth St. N. W., let contract to Davis, Wick & Rosengarten Co., 1406 G St. N. W., for erection garage on M St., between Twenty-eighth and Twenty-ninth Sts., 2-story, reinforced concrete; cost about \$250,000; sub-contracts will be received about Jan. 1 by Contr.

Fla., Davenport—Davenport Lumber and Supply Co., reported, building filling station and storage garage on Dixie Highway, for C. D. Cross, to be known as The Motor Inn, 60x105-ft., Spanish type, stucco finish; cost about \$15,000.

Fla., Melbourne—Smith-Grice Motor Co., Inc., capital \$50,000, chartered; C. S. Smith, S. D. Grice, C. F. Smith.

Fla., Pahokee—Automobiles—Elliott-Robinson, Inc., capital \$15,000, chartered; J. B. Elliott, G. C. McLarf, B. Elliott.

Fla., St. Petersburg—Automobiles—Budd & Marsh Co., incorporated; J. V. Budd, 817 Fifth St. N., L. A. Marsh, C. W. Martin.

Fla., St. Petersburg—Auto Supply Co., Inc., chartered; R. E. Noble, H. M. Carpenter, E. 227 11th Ave., N.

Fla., St. Petersburg—Knight-Shippet Motor, Inc., capital \$15,000, incorporated; E. W. Martin, F. A. Kennedy.

Ky., Louisville—Crutcher Garage Co., 124 E. Main St., reported, has permit for \$12,000 garage, 106 S. Brook St.; reinforced concrete.

La., Baton Rouge—W. H. Perkins, Chmn., Building Committee, School Dist. No. 1, plans erecting storage and truck garage; Wm. T. Nolan, Archt., 1048 Canal Bank Bldg., New Orleans. See Want Section—Bids Asked.

La., Monroe—Jones-Allen Truck Co., Inc., capital \$25,000, incorporated; W. E. Allen, River Front; Richard W. Jones, K. J. Jones.

La., New Orleans—American Auto Service, Inc., capital \$10,000, chartered; Peter V. Young, 2829 Annunciation St., Richard G. Brown.

Md., Baltimore—Edward J. Rosenstein, Equitable Bldg., plans erecting garage and service station south side of 39th St., west of Canterbury Rd.; Kubitz and Koenig, Emerson Tower Bldg., have prepared perspective and if permit is granted will prepare plans and specifications.

Md., Baltimore—Louis Gold, 1500 E. Baltimore St., will erect 2-story garage addition, cost about \$40,000; receiving bids; Wm. J. Degenhardt, Archt., 1305 N. Charles St.

Md., Baltimore—Automobiles—Penn-Cliff Service Co., 2678 Pennsylvania Ave., chartered; Neal R. Millison, Chas. L. Toor, Rose Toor.

Miss., Vicksburg—Porter Brothers, 1413 Walnut St., reported, acquired adjacent site; enlarge garage building.

Mo., Carthage—Southwest Tire Co., capital \$21,000, incorporated; H. C. Kauffman, 1712 Bird St.; Ella Kauffman, both Joplin; Irving Hunter, Carthage.

Mo., St. Louis—Meyer Tire Co., capital \$17,000, incorporated; Emil L. Meyer, Arthur O. Frehse, Mrs. Julius Hehn.

Mo., St. Joseph—John C. Mann (Brown Transfer and Storage Co.) 926 E. Sixth St., let contract to Sam Hotchkiss, Nineteenth and Penn Sts., at \$25,000 for garage, 1-story, 70x152-ft., brick, concrete floor, steel trusses, composition roof; Eckel & Aldrich, Archts., 1105 Corby Bldg. 11-17

Mo., St. Joseph—Filling Station—Industrial Oil Co. of St. Joseph, capital \$10,000, incorporated; H. A. Leary, 1825 S. Eleventh St.; C. W. Trickett, 600 Oakland St.; L. A. Crandall, 406 W. Forty-sixth St. Terrace.

N. C., Charlotte—City, reported, plans building municipal garage on Seigle Ave., cost \$25,000 to \$30,000; Robert L. Brown, Commr.

N. C., Charlotte—Dorris-Greene Motor Co., capital \$100,000, incorporated; C. W. Greene, J. B. Dorris, S. L. Thornton.

Okla., Hobart—Rock Island Oil Co., reported, plans erecting 2 filling stations, acquired site.

Okla., Tulsa—Sub-contracts for erection automobile hotel building for Tulsa Motor-ramp Corp., on Cincinnati Ave., as follows: Plumbing to Watt Plumbing, Heating and Supply Co., 608 S. Cincinnati St., Tulsa; brick, United Clay Products Co., 304 N. Nogales St.; steel to Patterson Steel Co., 801 N. Xanthus St., Tulsa. 10-27

Tenn., Memphis—B. W. Cooke & Son., reported, has permit for Forest Park Garage, 889 Union St.

Tex., Dallas—Prather Cadillac Co., Live Oak and Pearl St., let contract to Watson Co., 1927 S. Akard St., for \$85,000 warehouse and garage, 1-story, 220x250-ft., steel trusses, concrete floors, composition roof; contract for equipment not yet awarded; G. H. Thos. Washburn, Archt., 3109 Cornell St. 11-24

Tex., Floydada—Roy L. Snodgrass, Main and Mississippi Sts., let contract to Stephens & Thurman, at \$19,000 for erection garage, 1-story, 75x150-ft., concrete and brick, built-up roof; Jarry Shaffner, Archt., Staley Bldg., Wichita Falls. 11-3

Tex., Houston—L. L. Reber, 5005 Blossom St., reported, erect garage and service station on Chartres St.; concrete and stone; has 75x100-ft. site.

Tex., Houston—Southern Tire and Repair Co., U. S. McNally, Pres., 1023 Main St., reported, let contract to Tellepson Construction Co., 3900 Clay St., for erection 125x150-ft. building, Main and Leeland Sts.; reinforced concrete, cast stone, brick and stucco; cost about \$55,000.

Tex., Laredo—J. E. Applewaite, Ste. Maria and Lincoln St., let contract to J. E. Edwards at \$13,000 for erecting garage; 1-story, 110x105-ft., brick, concrete and steel; cement floors, iron roofing; Guy Trout, Archt., Lincoln St. 11-10

Tex., San Angelo—Cecil Taylor, reported, acquired site on W. Beauregard St., near S. Abe St., erect \$35,000 show room and garage; 2-story, concrete and steel, Spanish architecture; start construction after first of year.

Tex., San Antonio—Joe Murphy Tire Co., Inc., chartered; Joe Murphy, 213 Third St.; Mayme Murphy, Annie Chapman.

Tex., San Antonio—Matilde Elizondo, 2801 W. Houston St., reported, has permit for \$13,500 drive-in filling station, S. Laredo St.

Va., Norfolk—South Atlantic Oil Co., reported, received low bids from J. L. Abbott, Board of Trade Bldg., for erection filling station, etc., cor. Farmouth St. and College Place; Rudolph, Cooke & Van Leeuwen, Archts., Arcade Bldg.

Va., Roanoke—Automobiles—Alsop-Chambers, Inc., capital \$25,000, chartered; John A. Chambers, Jr., Ralph T. Cotterall, Guy B. Hazelgrove, American Nat'l Bank Bldg., all Richmond.

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Ala., Birmingham—City, Eunice Hewes, Clk., plans expending \$19,175 to pave First Avenue-Cotton Avenue route; North Twenty-fourth St.-Lewisburg Highway route; North Twenty-fifth St. route to North Birmingham; Division Ave., Thirty-sixth Ave. and Forty-sixth Alley; A. J. Hawkins, City Engr.

Ala., Selma—City receives bids Dec. 2 for 4275 ft. concrete curb, 4050-ft. concrete sidewalk on Third Ave.; W. O. Crisman, City Engr.

Ark., Hamburg—City, Dr. M. D. Easter, Mayor, contemplates grading, curbing, guttering and concrete paving 4 sides city square and 1 block each on 4 intersecting streets; estimated cost \$50,000; gravel surface or concrete slab all unpaved streets.

Ark., Harrison—City plans creating paving district, including 8 blocks on South Pine St.; plan paving street. Address City Clk.

Ark., Marked Tree—City plans expending about \$23,000 to gravel $4\frac{1}{2}$ mi. principal streets. Address City Clk.

Ark., Pine Bluff—Board of Commrs., Street Improvement Dist. No. 96, R. E. Lee, Chmn., plans receiving bids about Dec. 15 to pave Pullen St., Cedar to Poplar; N. J. Gantt and Guy B. Smith, Engrs., National Bank Bldg.

Fla., Bartow—Polk County Commrs., plan Scenic Highway, cost \$50,000. See Financial News—Bond Issues Proposed.

Fla., Fort Pierce—St. Lucie County, E. H. Collins, County Engr., plans straightening and widening State Road No. 8, county's portion of Okeechobee road.

Fla., Pensacola—Escambia County Commrs., plan Ferry Pass road, between Pensacola and Ferry Pass; cost \$80,000.

Fla., Sarasota—Sarasota County Commrs., J. R. Peacock, Clk., receive bids Dec. 5 for 5 roads: 5 mi. Tuttle Ave. road; 2.5 mi. Myakka Road; 1.37 mi. Hancock Road; 2 mi. Bee Ridge Extension road; 1 mi. Gocio road; plans from Norman G. Corson, County Engr.

Fla., Tampa—Hillsborough County Commrs., W. S. Dickenson, Clk., received bids Dec. 9 for roads in Palm River Special Road and Bridge Dist.; 44,000 sq. yd. lime rock base, with double surface treatment, with bridges, culverts and appurtenances; plans from A. B. Pimm, County Engr.

Ga., Atlanta—City, I. N. Ragsdale, Mayor, plans receiving bids to repave Poplar St., Cone to Spring; Cain St., Peachtree to Ivy; asphalt on Belgian block.

Ga., Cartersville—City, H. Carl Nelson, Mayor, plans letting contracts soon to pave East Main and Douglas Sts.

Ga., Waycross—City Commn., W. E. Lee, Clk., receives bids soon to pave McDonald St., and Screven Ave.; Melville Bronson, City Engr.

Kentucky—State Highway Commn., Frankfort, received low bids to grade and drain 4 roads: Warren County—5.382 mi. Glasgow-Burkesville road, Ping Brothers, Somerset, \$63,436; Ohio County—3.852 mi. Hartford-Calhoun road, J. B. Westerfield, Owensboro, \$31,806; 4.865 mi. Beaver Dam-Rosine road, J. B. Westerfield, \$31,046; Rowan-Elliott Counties—26 mi. Moorehead-Sandy Hook road, Ashland Supply Co., Ashland, \$248,194. 10-20, 11-17

Ky., Catlettsburg—State Highway Commn., Frankfort, receives bids Dec. 22 for 10.5 mi. grading and draining 10.5 mi. Hood's Creek road, from Princess to Bellefonte; plans on file and from Dist. Engineer's Office, Ashland; E. N. Todd, State Highway Engr.

Louisiana—Louisiana Highway Commn., Frank T. Payne, Chmn., Baton Rouge, received low bids for 3 roads: Union Parish—4.949 mi. road, from Cherry St. road, Bernice, toward Farnerville, Drew Bros., Minden, La., \$27,297; Vernon Parish—9.858 mi. Leesville-Alexandria Highway, from point southwest of Slagle to Vernon-Rapides Parish line, I. M. Goldberg, Abbeville, La., \$66,162; St. Helena Parish—14.275 mi. Greensburg-Baton Rouge Highway, from gravel road at Grangeville to Amite River, Williams Bros. Construction Co., Osayka, Miss., \$122,297. 10-27

La., Amite—Louisiana Highway Commn., Frank T. Payne, Chmn., Baton Rouge, receives bids Dec. 20 for 5.64 mi. Baton Rouge-Amite airline road, from Tangipahoa-St. Helena Parish line, southwest of Amite,

towards Baton Rouge, to Montpelier; Nichols W. Bowden, State Highway Engr.

La., Crowley—City, P. S. Pugh, Jr., Mayor, considering street paving.

La., De Ridder—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, plans appropriating \$130,000 toward completing Evangeline Highway, east and west through southern part of Beauregard Parish; cost \$180,000.

Maryland—State Roads Comm., John N. Mackall, Chmn., Baltimore, received low bids for 2 roads: Anne Arundel County—1.2 mi. gravel, from end of Cont. AA-47 to Deale, Frank Moreland Co., Greenock, \$14,867; Washington County—1.5 mi. concrete shoulders along Cearfoos Pike between Cearfoos and Hagerstown, Bester-Long Construction Co., Hagerstown, \$13,291. 11-17

Md., Baltimore—Board of Awards receives bids Dec. 7 to grade, curb and pave with 7080 sq. yd. sheet asphalt on concrete base in Cont. No. 443; plans on file; Nathan L. Smith, Highways Engr.; C. F. Goob, Ch. Engr.; Wm. F. Broening, Mayor.

Miss., Columbia—City, Mayor and Board of Aldermen, receive bids Dec. 6 for 6850 sq. yd. concrete pavement, certain storm drainage, curb and gutters; plans from Henry A. Mentz, Consult. Engr., Hammond, La.

Miss., Hazlehurst—City, Board of Aldermen, plans receiving bids to pave Main St.; Massena L. Culley, Consult. Engr., New First National Bank Bldg., Jackson.

Miss., Pascagoula—Jackson County Board of Supvrs., Fred Taylor, Chmn., and Road Protection Comm., F. H. Lewis, Chmn., receive bids Dec. 15 for 2 mi. road protection and Beach Driveway, between Louisville and Nashville R. R. bridge, and Halstead road, Ocean Springs; Sec. A—139,318 lin. ft. 7½-in. creosoted timber sheet piles, 66,343 lin. ft. 15½-in. copper bearing steel sheet piles, or 29,025 lin. ft. 36-in. precast concrete piles; 3573 cu. yd. concrete in road protection, sidewalk and combination seat and wave breaker; 362,181 lb. reinforcing steel, 12,017 sq. yd. reinforced concrete, or 5344 sq. yd. 6-in. plain concrete pavement, 3523 lin. ft. 6x18-in. concrete curb, etc.; Sec. B—4900 lin. ft. untreated foundation piling, 100,419 lin. ft. 7½-in. creosoted timber sheet piles, 47,819 lin. ft. 15½-in. copper bearing steel sheet piles, or 20,921 lin. ft. 36-in. precast concrete sheet piles; 28,032 cu. yd. dredged earth fill; 219,594 lb. reinforcing steel; 9069 sq. yd. 7-in. reinforced concrete, 1672 sq. yd. 6-in. plain concrete pavement; Sec. C—87,552 lin. ft. 7½-in. creosoted timber sheet piles, 41,691 lin. ft. 15½-in. copper bearing steel sheet piles, or 18,241 lin. ft. 36-in. precast concrete sheet piles; 22,948 cu. yd. dredged earth fill; 255,223 lb. reinforcing steel; 11,657 sq. yd. reinforced concrete, or 6055 sq. yd. 6-in. plain concrete pavement, 5450 lin. ft. 6x18-in. concrete curb; plans on file and from F. M. McGowan, Consult. Engr., Ocean Springs.

Miss., Waynesboro—Wayne County Commrs. plan building road in Waynesboro-Frost Bridge Separate Road Dist.; cost \$75,000. See Financial News—Bond Issues Proposed.

Missouri—State Highway Dept., Jefferson City, receives bids Dec. 9 for 24 roads and 19 bridges: Andrew County—4.922, 4.969 and 2.665 mi. 30-ft. graded earth, Savannah County, 281,107 cu. yd. excavation; Nodaway County—4.681 mi. 30-ft. graded earth, Andrew County line north, 140,496 cu. yd. excavation; bridge over overflow of White Cloud and over White Cloud, one 45-ft. and four 25-ft. deck girders; four 20-ft. I-beams; Worth County—4.162 mi. 18-ft. gravel, Worth north and south, 5150 cu. yd. paving; Livingston County—2.068, 3.460 and 4.027 mi. 18-ft. gravel, Chillicothe east, 11,818 cu. yd. paving; Linn County—3.466 mi. 18-ft. gravel, Laclede west, 4228 cu. yd. paving; 3.258 and 3.463 mi. 18-ft. gravel, Laclede west, 6180 cu. yd. excavation, 8102 cu. yd. paving.

In Clark County—3.556 mi. 18-ft. gravel, 3.517 mi. 30-ft. graded earth, Kahoka-Wayland road, 79,280 cu. yd. excavation; bridge over Fox River, 90-ft. truss, four 40-ft. deck girders; Monroe County—2.746, 2.133 and 4.315 mi. 18-ft. gravel, Paris west, 11,864 cu. yd. paving; Clay County—333 mi. 30-ft. graded earth, Liberty-Holt road; bridge over Fishing River, 84-ft. railroad truss, two 30-ft., one 40-ft. deck girders; repair Kansas City-Liberty Building retaining wall at bridge; Barry County—20-ft. graded earth, Monett south (spur); 120-ft. bridge left of Station 93 plus 25, double 8x6 box.

In St. Clair County—350 mi. Lowry City-Oscola road, 34,879 cu. yd. excavation, 8810 lb. structural steel, bridges over Osage River, two 35-ft. deck girders, 225-ft. arch, six 50-ft. deck girders; bridge over Overflow, four 20-ft. slabs; Greene County—4.327, 4.688 and 4.116 mi. 30-ft. graded earth, Springfield north, 119,342 cu. yd. excavation, bridges

over creeks, over Little and Dry Sac River, over Dry Fork, double 12-ft. R. C. box culvert, three 50-ft. deck girders, four 50-ft., three 30-ft. deck girders; Bollinger County—3.802 mi. 24-ft. graded earth, Dongola-Zalma road, 60,308 cu. yd. excavation; bridges at Station 359 plus 27, double 5x2½-ft. box; at Station 372 plus 50, over creek, double 6x4 box; Dunklin County—956 mi. 12 and 16 ft. gravel, 7867 cu. yd. excavation, 54,210 lb. structural steel; 3 bridges over Overflow, bridge over Varney River; two 40-ft., one 30-ft. and one 25-ft. I beams; T. H. Cutler, State Highway Engr.

Mo., Campbell—City, M. B. Beasley, Mayor, plans expending \$80,000 for paving; A. C. Moore, Engr., Joplin Natl. Bank Bldg., Joplin.

Mo., Jefferson City—State Highway Dept. plans paving Route 50, from Jefferson City to Country Club, Ten Mile Drive, with improved black top surfacing of crushed rock and asphalt 18 ft. wide; T. H. Cutler, State Highway Engr.

Mo., Poplar Bluff—City plans receiving bids to pave Eighth St., Maud to Cynthia. Address City Clk.

North Carolina—State Highway Dept., Raleigh, Frank Page, Commr., receives bids Dec. 13 for 15 roads and bridge approaches, including 48.51 mi. hard surfaced 65.29 mi. dirt road and structures: Pitt County—grading and approaches to Tar River, Route 11; Duplin County—18.3 mi. grading and structures, Route 24, from Kenansville to Onslow County line; Robeson County—1.7 mi. Route 70 to 6 mi. south of Fairmont; 7.9 mi. concrete, Route 211, Lumberton to Bladen County line; Durham County—10.06 mi. top soil and structures, Orange County line to Nelson; Lee County—6.3 mi. hard surface, Route 50, Chatham County line toward Sanford; Orange County—2.61 mi. top soil and structures, Chapel Hill toward Nelson; Vance County—4.7 mi. concrete, Route 57, from end of hard surface to Granville County line; Hoke County—9 mi. concrete, Route 24, Raeford to Scotland County line; Rockingham County—4.5 mi. grading and structures, Route 77, Leaksville to Virginia line; Iredell County—10.37 mi. concrete, Route 10, Catawba County line to Statesville; Lincoln County—4.97 mi. dirt roadway, Route 206, Lincoln to Gaston County line; Union County—15 mi. dirt road, Route 151, Monroe to Cabarrus County line; Cleveland County—9.7 mi. concrete, Route 18, Shelby to Fallston; Cherokee County—4 mi. top soil or gravel, from point west of Murphy to about 10 mi. from Tennessee line; Haywood County—4.15 mi. grading and structures, Route 10, Buncombe County line to Canton; Lester Ames, Ch. Highway Engr.

N. C., Asheville—State Highway Comm., Raleigh, plans receiving bids in spring to pave 4 mi. highway from Buncombe County line to Main St., Canton; total cost \$200,000; Lester Ames, Ch. Highway Engr.

N. C., Charlotte—City Comm., plans widening North Graham St., from West Trade St. to first railroad bridge, beyond West Twelfth St.

N. C., Franklin—State Highway Comm., Raleigh, considering building section of State Highway No. 28, Macon County, between Franklin and Highlands, to pass under waterfall 150-ft. high in Cullasaha River; James G. Stikeleather, Ninth Dist. Highway Commr.

N. C., Wilmington—New Hanover County Commrs. plan rock base, macadam pavement on Kenwood Ave., Princess Street road to Route 30; Audubon Blvd., Wrightsville Turnpike to Route 20; Third St., Winter Park, from Wrightsville Highway to Highway No. 20; plan hard surface road through Castle Hayne; Addison Hewlett, Chmn.

N. C., Winston-Salem—City, Thomas Barber, Mayor, plans permanent paving on Longview Drive, from Woughtown St. to railroad tracks.

Okl., Ada—City, Lee Daggs, Chk., receives bids Dec. 6 to pave Fourteenth St., Townsend to Rennie Ave.; Black & Veatch, Engrs., Mutual Bldg., Kansas City, Mo.

Okl., Enid—Garfield County Commrs. plan building additional gravel roads and grading and building culverts on dirt roads.

Okl., McAlester—Pittsburgh County, W. E. McGowan, Commr., plans 7 mi. road from McAlester to Bache.

Okl., Newkirk—Kay County, C. C. Savage, Commr., plans laying slabs on 3 roads: 6½ mi. between Brame and Oklahoma-Kansas line; 10 mi., from Three Sands to 10-mi. stretch of paving north from Perry; 6½ mi., from U. S. Highway No. 177, south of Three Sands to connect with pavement end south of Marland and 101 Ranch.

South Carolina—State Highway Dept., Ben M. Sawyer, Ch. Highway Commr., Columbia, receives bids Dec. 13 for 13 roads and 11 bridges:

Anderson County—7.9 mi. grading, drainage structures, 5-in. Portland cement concrete base, 18-ft. wide, 2-in. asphaltic concrete surfacing, Route 15, from Belton to end of pavement near Anderson; Beaufort County—22.4 mi. grading, drainage structures, 18-ft. Portland cement concrete pavement, Route 28, from Beaufort to intersection of Routes 28 and 17 near Pocotaligo; Calhoun County—6 mi. grading, drainage structures, 18-in. Portland cement concrete pavement, Routes 2 and 45, from St. Matthews toward Columbia; Charleston County—approaches to Ashley River Bridge, 5-in. concrete base, 3-in. sheet asphalt surfacing; approaches to St. John's Island overhead bridge and Wallace Creek bridge, Portland cement pavement, Route 17.

In Cherokee County—6.2 mi. Route 29, from Blacksburg to N. C. line, alternate bids on 3-in. sheet asphalt surfacing, 5-in. Portland cement concrete base; 5 mi. from Gaffney toward Jonesville, Route 11, and 5.3 mi. Route 11, from Gaffney toward Cheanee; alternate bids on 3-in. sheet asphalt surfacing, 5-in. Portland cement concrete base; Florence County—16.1 mi. Route 17, from Effingham through Cowards, Scranton and Lake City to Williamsburg County line; Jasper County—5.9 mi. Route 17, from Coosawhatie toward Yemassee; Lexington County—12.9 mi. Route 3, from intersection of Routes 3 and 6, below Swansea to intersection of Routes 2 and 3, near Dixiana; Marion County—8 mi. Route 17; Saluda County—15.3 mi. Route 39, from Edgefield County line through Ward, Ridge Springs, Monetta to Batesburg; Williamsburg County—12.8 mi. Route 17, from Florence County line through Cades to Kingstree.

In Dillon County—4.5 mi. Route 9 from Dillon toward Lake View; Edgefield County—1.6 mi. approaches to underpass under Southern R. R. at Salters Pond between Johnston and Trenton, Route 19; Lexington-Richland Counties—5 mi. from Saluda River Dam site via Irmo to Route 2; Richland County—2.2 mi. Route 215, from end of present paving contract near Hinnants Store to Fairfield County line, Little River; Bamberg-Orangeburg Counties—bridge on Route 21 between Branchville and Smoaks over Edisto River, concrete and creosoted timber, 675 ft. long, 225 ft. concrete, 450 ft. treated timber over river proper and 3 creosoted timber bridges in swamp, one 330-ft., one 225-ft. and one 195-ft. long; Dillon County—198-ft. concrete bridge over Little Pee Dee River, Route 9, between Dillon and Lake View, widening 3 bridges; Florence County—275-ft. concrete bridge over Lake Swamp near Lake City, Route 17; Newberry County—2 concrete 170-ft. each overhead bridges over C. N. & L. R. R. near Newberry and near Jalapa, Route 2; Oconee County. 75-ft. creosoted timber bridge between Fairplay and Knox Bridge, Route 182.

Tennessee—Dept. of Highways and Public Works, C. N. Bass, Ch. Highway Commr., Nashville, receives bids Dec. 16 for 17 roads, including 104 mi. grading and drainage, 33 mi. cement concrete and 17 mi. asphaltic concrete, and 38 bridges: Shelby County—1.819 mi. State Highway No. 15, between State Highway No. 1 near Bartlett and Fayette County line; 3 bridges over 200-ft. span; 1.819 mi. State Highway No. 1, between Memphis city limits and Federal Aid Project 36-D; bridge over 20-ft. span; Humphreys County—12.189 mi. State Highway No. 1, between Tennessee River and Waverly; Putnam County—10.157 mi. Highway No. 24, between Smith County line and State Aid Project 123-D; Carroll County—9.976 mi. concrete pavement on concrete base, Highway No. 22, between Huntingdon and McKenzie; alternate bids on rock or sheet asphalt on concrete base; 12,727 mi. State Highway No. 44, between Henderson County line and Huntingdon; 8 bridges over 20-ft. span.

In Knox County—7.061 mi. concrete pavement on concrete base, Highway No. 1, Knoxville corporation and Three Points; alternate bids on rock or sheet asphalt on concrete base; 5.728 mi. Highway No. 1, between Three Points and Grainger County line; 2 bridges over 20-ft. span; Chester County—4.244 mi. Highway No. 5, Henderson and Madison County line; 3 bridges over 20-ft. span; Madison County—11.422 mi. Highway No. 5, Chester County line and point near Jackson; 7 bridge over 20-ft. span; McMinn County—2.341 mi. Highway No. 2, between Athens and Federal Aid Project No. 60; Hawkins and Greene Counties—17.442 mi. cement concrete, Highway No. 34, between Hamblen County line and Greenville; Putnam County—14.134 mi. Highway No. 74, Cookeville and Monterey; bridge over 20-ft. span; Loudon County—4.342 mi. Highway No. 2, Lenoir City and Tennessee River; 6.661 mi. Highway No. 2, between Monroe County line and Loudon; bridge over 20-ft. span.

In Monroe County—6.466 mi. Highway No. 2, between McMinn County line and Loudon

County line; Dyer County—15.514 mi. cement concrete highway, between Heloise and Dyersburg; Marion County—4 concrete deck girder bridges on .110 mi. Highway No. 2, between State Aid Project No. 170 and Jasper; Giles County—concrete and steel bridge on .076 mi. Highway No. 15 over Richland Creek; Marshall County—concrete deck girder bridge on .028 mi. Highway No. 51 over Rich Creek; Obion County—6 concrete pile, timber pile and steel bridges on .803 mi. Highway No. 41, between Kenton and Union City; Hancock County—concrete and steel bridge on .080 mi. Highway No. 66 over Clinch River; Monroe County—concrete and steel bridge on .211 mi. Highway No. 64 over Little Tennessee River; Crittenden County—Arkansas-Shelby County-Tennessee driveways on Harahan Bridge over Mississippi River, Memphis, Tenn., about 4850 ft. long, two 14-ft. wide driveways; estimated cost \$3,700,000.

Tenn., Cartersville—City, H. Carl Nelson, Mayor, will let contracts soon to pave East Main and Douglas St.

Tenn., Chattanooga—Hamilton County Highway Comm. plans building section of Lee Highway, near Ooltewah.

Tenn., Knoxville—Knox County plans Maloney Road, through property of Peter Blow and C. H. Harvey, South Knoxville. Address County Commrs.

Tenn., Nashville—City, Hilary E. Howse, Mayor, plans widening First Ave., Public Square to Broadway; Gay St., Second to Third; W. W. Southgate, City Engr.

Tenn., Nashville—City, Hilary E. House, Mayor, plans boulevard along river, from Sparkman Street Bridge to Hadley Bend Bridge at powder plant.

Tenn., Somerville—Fayette County Court plans about 60 mi. roads, cost \$400,000. Address County Commrs. See Financial News—Bond Issues Proposed.

Texas—State Highway Comm., R. S. Sterling, Chmn., Austin—receives bids Dec. 6 for 6 roads and bridge: Archer County—9,339 mi. grading and drainage structures, Highway No. 79, from Archer City north, 163,956 cu. yd. excavation and borrow, 181,751 lb. reinforcing steel; 8,978 mi. grading and drainage, Highway No. 79, from point north of Archer City to Wichita County line, 70,845 cu. yd. excavation and borrow, 38,697 lb. reinforcing steel; Young County—12,596 mi. grading and drainage, Highway No. 24, 119,542 cu. yd. excavation and borrow, 195,379 lb. reinforcing steel; 12,164 mi. grading and drainage, Highway No. 24, from New Castle to Olney, 96,459 cu. yd. excavation and borrow, 75,213 lb. reinforcing steel; Lee County—8,623 mi. grading and drainage structures, Highway No. 102, from Lexington to Milan County line, 50,725 cu. yd. excavation and borrow; Shackelford County—13,122 mi. crushed stone base, Highway No. 8, from point west of Albany to Jones County line, 16,290 cu. yd. caliche sub-base, 17,815 cu. yd. crushed stone surfacing; McLennan County—91.2 ft. timber bridge with steel stringers over Manos Creek, State Highway No. 6, 37,824 lbs. structural steel; plans on file; R. A. Thompson, State Highway Engr.

Tex., Bellville—State Highway Comm., R. S. Sterling, Chmn., Austin, receives bids Dec. 6 for 14.202 mi. grading and drainage structures, Highway No. 73-A, from Brazos River to Mill Creek, 207,457 cu. yd. excavation and borrow, 73,540 lb. reinforcing steel; concrete pile bridges, 95,693 lb. reinforcing steel; plans on file and from Herbert Schroeter, Austin County Engr.; R. A. Thompson, State Highway Engr.

Tex., Borger—City plans expending \$141,000 to pave streets. Address City Clk.

Tex., Cotulla—La Salle County, G. A. Wilhausen, Judge, plans grading and bridges, 2 roads: 7 mi. Highway No. 55, from Dimmitt County line to intersection with Highway No. 2 at Bart, cost about \$40,000; 46 mi. Highway No. 2, San Antonio-Laredo Highway, from Frio County line near Dilley to Webb County line, near Encinal, cost about \$160,000; G. A. Bracher, County Engr.

Tex., Cuero—DeWitt County, Stanley Kulawik, Judge, receives bids Dec. 19 to hard surface 18.49 mi. State Highway No. 119, from Davy to Goliad County through Yorktown; S. H. Gullede, Res. Engr., Yorktown.

Tex., Dallas—City Plan Comm. approved plans to widen San Jacinto St., St. Paul to Leonard.

Tex., Dallas—Dallas County, F. H. Alexander, Judge, plans Dallas-Rhame road, from point on Highway No. 1, 8 mi. northeast of Dallas, near Bachman's Reservoir, to intersection with Highway No. 40, and then toward northwest through Dallas County to Grapevine, and up for 50.3 mi. See Financial News—Roads, Streets, Paving.

Tex., Dickens—Dickens County, H. A. C. Brunett, Judge, plans 10 mi. re-grading, widening and graveling Highway No. 18, from east city limits of Speer, to intersection with Highway No. 53; estimated cost \$100,000; including bridges over 8 creeks.

Tex., Edna—Jackson County, John G. Vance, Judge, plans 22.9 mi. grading, bridges and 18-ft. concrete pavement; estimated cost \$900,000; \$175,000 bond issue available.

Tex., El Paso—El Paso County, E. B. McClintock, County Judge, plans widening and paving 3 roads in Upper Valley: Widen Smelter road, from viaduct to cement plant, cost \$150,000; pave Canutillo road, \$30,000; extend paving on Country Club road, \$175,000; Fred Wilson, County Engr.

Tex., Galveston—City, E. H. Ivey, Commr. of Streets and Public Property, plans paving Strand, Market and Forty-fifth St.; Charles A. Holt, City Engr.

Tex., Galveston—City, Jack E. Pearce, Mayor, plans expending \$11,000 to shell streets in west end, including Avenues P, R and U; E. H. Ivey, Street Commr.

Tex., Goliad—Goliad County, J. A. White, County Judge, plans system of roads in county, including Highway No. 12. See Financial News—Bond Issues Proposed. 10-13

Tex., Hallettsville—Lavaca County, C. L. Stavino, Judge, plans 10 mi. grading and bridges, Highway No. 109, Yoakum-Shiner-Moulton-Flatonia road, through Road Dist. No. 21; W. H. Koether, County Engr., Yoakum.

Tex., Houston—City, George Woods, Mgr., plans widening Houston Ave. to 70 ft. from Washington Ave., to Shearn, to 52 ft. remaining section; J. C. McVea, City Engr.

Tex., Houston—City, George Woods, Mgr., receives bids soon for widening and paving Fannin St., 60-ft. wide from McKinney Ave. to Calumet Drive; Hermann Estate will pave remaining strip of Fannin St., from Calumet Drive to Hermann Drive, under private contract.

Tex., Houston—Houston Land Corp., R. C. Burrows, Sec., Post-Dispatch Bldg., is receiving bids to pave ½ mi. North MacGregor Way, from Hermann entrance of Crescent Island to connect with Riverside Terrace; estimated cost \$30,000.

Tex., Johnson City—Blanco County, Wm. Marteny, Judge, plans 16 mi. grading, bridges and hard surfacing Highway No. 108, from Johnson City to Burnet County line; estimated cost \$170,000; bridge across Pedernalis River; estimated cost \$40,000.

Tex., Karnes City—State Highway Comm., R. S. Sterling, Chmn., Austin, receives bids soon for 5.83 mi. grading and bridges, Highway No. 16, San Antonio-Corpus Christi road, from Wilson County line, near Falls City, to end of Road Dist. No. 3, Karnes County; R. A. Thompson, State Highway Engr.; E. L. Mavek, Res. Engr.

Tex., Lefors—Gray County, T. M. Wolfe, Judge, plans 14 mi. grading, bridges and 18-ft. Bates type concrete pavement, Highway No. 33, Road Dist. No. 2, from Carson County line to Roberts County line; estimated cost \$483,560; C. L. Hasie, Engr.

Tex., Littlefield—Town plans street paving. Address Town Clk.

Tex., Marlin—Falls County, Walter S. Hunnicut, Judge, plans 7.63 mi. 3-in. bituminous macadam surfacing on gravel base, Highway No. 108, from Rosebud at intersection with Highway No. 44, to Bell County line; estimated cost \$171,721; Van B. Harris, Engr.

Tex., San Antonio—City, Phil Wright, Acting Mayor, receives bids Dec. 5 to improve Ira Ave.: 1½-in. hot rock asphalt, or 1½-in. asphaltic topping; concrete curbs; Fred Fries, Clk.

Tex., Throckmorton—Throckmorton County, J. L. Robinson, Judge, plans road building; cost \$650,000. See Financial News—Bond Issues Proposed. 11-3

Tex., Tilden—McMullen County Commrs. plan road and bridge building; cost \$85,000. See Financial News—Bond Issues Proposed.

Tex., Victoria—Victoria County, P. P. Putney, County Judge, plans improving Highways No. 12, 29 and 113, cost \$1,092,000. See Financial News—Bond Issues Proposed. 10-13

Tex., Waxahachie—State Highway Comm., R. S. Sterling, Chmn., Austin, plans receiving bids soon to grade and construct drainage structures on Highway No. 6, in Italy and Milford Dist., Road Dist. No. 6 and 7; R. A. Thompson, State Highway Engr.

Tex., Waxahachie—Ellis County, H. R. Stovall, Judge, plans 8.289 mi. grading and bridges and Bates type concrete, Highway No. 6, from Forrester to Milford Dist.; estimated cost \$396,000; W. A. Spalding, Engr.

Va., Alexandria—State Highway Comm., H. G. Shirley, Chmn., Richmond, considering widening River Road, between Alexandria and Washington.

Va., Norfolk—City, I. Walke Truxtun, Mgr., plans improving Ocean View Ave. between First View St. and Cottage line; Walter H. Taylor, Director of Public Works.

Va., Winchester—State Highway Comm., H. G. Shirley, Chmn., Richmond, considering widening Shenandoah Valley Pike, to 40 ft. from West Virginia line on north to Roanoke on south.

W. Va., Huntington—City, Mayor Neal, plans widening Norway Ave., between Gallaher and Olive St.; J. C. McVea, City Engr.

W. Va., Morgantown—Monongalia County Commrs. plan road building in Union Road Dist., cost \$266,000. See Financial News—Bond Issues Proposed.

Contracts Awarded

Alabama—State Highway Comm., Woolsey Fennell, Highway Director, let contracts for 11 cement concrete roads: Autauga County—17.86 mi. from L. & N. R. R. overhead bridge near Prattville, to Chilton County line, Mountain Creek, Davis Construction Co., Walton Bldg., Atlanta, Ga., \$236,162; Pike County, 9 mi. between Troy and Orion, Mobile Construction Co., Meaher Bldg., Mobile, \$143,484; Escambia County—2.001 mi. in Brewton, on Brewton-Evergreen road, Noonan-Lawrence, Thiesen Bldg., Pensacola, Fla., \$31,866; Chambers County—5.69 mi., between Lanett and Fairfax, Davis Construction Co., \$90,148; Houston County—5.5 mi., from city limits of Dothan, toward Ozark, Couch Construction Co., Dothan, \$82,683; Culman County—1 mi., through town of Cullman, on State Road No. 7, J. B. McCreary Co., Atlanta, \$13,462; Escambia County—town of Atmore, 1.52 mi. paving, State Road No. 73, through Atmore to town of Atmore, at \$32,180; Macon County—9 mi., from end of pavement in Tuskegee, to point where road forks to Union Springs and Columbus, Ga., Nixon & Phillips, Birmingham, Ala., \$18,209; Dale County—8.47 mi., between Ozark and Choctawhatchee River, State Road No. 7, Davis Construction Co., \$112,931; Baldwin County—12.25 mi., between Perdido Station and Bay Minette, J. E. Pryor, Sharon, Tenn., \$172,850; Covington County—2 mi. on road between Andalusia and Brewton, and 1.3 mi. between Andalusia and Gant, R. S. Taylor, Tuscaloosa, \$46,444. 10-27

Ark., Conway—City Commrs. Street Improvement Dist. No. 11 let contract to Charles W. Jones, Conway, and P. F. Connolly, Little Rock, at \$21,395 for ¼ mi. 28-ft. wide paving, with curb, on Faulkner St.; Glenn D. Douglas, Engr., Home Insurance Bldg., Little Rock. 11-17

Ga., Atlanta—City, I. N. Ragsdale, Mayor, let contract to J. R. Cothran Co., Candler Bldg., at \$19,202, for 8705 sq. yd. street paving.

Ga., Brunswick—McDonald Construction Co., Marble Arcade Bldg., Lakeland, Fla., has contract to surface treat road through Altamaha causeway, between Glynn County line and Darien.

Ga., Decatur—City Comm., let contract to Sam E. Finley Co., 212 W. North Ave., Atlanta, to pave Second Ave. between Decatur Place and South Decatur car line.

Ga., Waycross—City, W. E. Lee, Clk., plans letting contract to MacDougald Construction Co., 180½ Spring St., Atlanta, for concrete gutters on Tebeau St. 11-24

Louisiana—Louisiana Highway Comm., Frank T. Payne, Chmn., Baton Rouge, let contract for 2 roads: St. Tammany Parish—2.154 mi. embankment on Chef Menteur Highway, from northeast end of Rigolets Bridge to intersection with present gravel road south of Salt Bayou, Gulf Coast Dredging Co., Galveston, Tex., \$111,771; Natchitoches Parish—7.119 mi. Creston-Saline Highway, H. E. Machen, Winnfield, La., \$52,037. 10-13

La., Covington—Russell Construction Co., Kentwood, has contract at \$24,192 for 17 mi. roads in Ward 5.

Miss., Hazlehurst—D. F. Gates & Co. has contract for concrete work on 2 highways: Hazlehurst-Georgetown road; Hazlehurst-Utica Highway

Miss., Kosciusko—Attala County let contract to Sam B. Boyd Construction Co., Columbia, at \$17,000 for 10 mi. highway between Starkville and Durant; Columbia Gravel Co. awarded contract to furnish gravel.

Mo., Excelsior Springs—City let contract to Louis Construction Co., 202 Dwight Bldg., Kansas City, to pave East Excelsior St., Penn to Linden Ave., with Amiesite.

Mo., Joplin—City, Maud E. Fons, Clk., let contract to V. E. Koch, 702 N. Pearl St., for sidewalks on west side Murphy Ave.,

Twenty-fourth to Twenty-sixth St.; curbs and gutters on Murphy Ave., Twenty-sixth St. to Commercial Club addition; alley between Wall St. and Pearl Ave., from Sixth to Seventh; Tri-State Construction Co., for sidewalks on east side of Murphy Ave.; Charles DuBois for sewer in Eastmoreland Sewer Dist. No. 3.

Mo., Poplar Bluff—City let contract to Tidd & Cole, Hutchinson, Kansas, at \$11,218, to pave Oak St., Second to Fifth.

N. C., Lancaster—Stacey Bros., Augusta, Ga., have contract for 6 mi. paving; \$150,000 bonds, recently voted, available. Address City Clk.

Okl., El Reno—City, E. W. Fassett, Mgr., let contract to S. O. Maxey & Co., Durant, at \$21,154 for 2300 ft. grading, curbing and 30-ft. wide 6-in. plain concrete paving. 11-17

S. C., Camden—City, W. H. Halle, Clk., let contract to Southern Paving Construction Co., Volunteer Life Bldg., Chattanooga, Tenn., at \$28,850 for about 1 mi. Warrenite bitulithic paving.

Tex., Jourdanton—Atascosa County Comms., Earl D. Scott, County Judge, let contract to Kelly Construction Co., San Antonio, for 25.7 mi. bituminous macadam surfacing, Highway No. 9, Pleasanton to Live Oak County line; Jas. V. Curnett, County Engr. 11-24

Tex., Mercedes—City let contract to J. H. Mellon & Co., at \$50,000, for sidewalks.

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

Ky., London—City, J. Emery Walden, Clerk, voted \$25,000 bonds for sanitary sewer system. See Financial News—Bond Issues Proposed.

La., Hammond—Board of Comms. of Tangipahoa Drainage Dist. No. 1, receives bids Dec. 19 for outfall sewer extension; E. G. Freiler, Engr. See Want Section—Bids Asked.

Md., Baltimore—City receives bids Dec. 7 for manholes, etc. See Want Section—Bids Asked.

Mo., Chillicothe—City, reported, plans expending \$25,000 for sewers; C. A. Haskings, 822 Finance Bldg., Kansas City, Engr.

Mo., Jefferson City—City receives bids Dec. 7 for construction of Sewer Dist. No. 32; F. E. Ross, City Engr. See Want Section—Bids Asked.

Mo., Joplin—See Roads, Streets, Paving.

Mo., St. Joseph—Tom Johnson, Inc., 3745 Wayne St., Kansas City, reported, low bidder for northeast Whitehead fork main sanitary and storm sewer.

Mo., St. Joseph—Oscar H. Schmidt, Bartlett Trust Bldg., has contract at \$27,946 for 295 lin. ft. of 60-in., 1050 lin. ft. of 30-in., 1396 lin. ft. of 36-in., 350 lin. ft. of 24-in. reinforced concrete pipe for sewers on 24th and Felix Sts.; Wm. Spann, City Engr. 11-17

Okl., Cement—City, reported, voted \$30,000 bonds for sewerage system. See Financial News—Bond Issues Proposed.

Okl., Okemah—City, reported, has preliminary plans for 3 miles storm sewers; cost \$35,000; A. C. McCord, City Engr.

Okl., Ponca City—City, reported, let contract to W. B. Carter, 1509 E. Admiral St., Tulsa, at \$54,570 for sewers in Dist. 38; Hugh W. Crawford, City Engr.

Okl., Seminole—City, reported, plans lateral sewers in Dist. 5; cost \$29,000; R. B. Reeves, City Engr.

S. C., Gaffney—Limestone Mills, reported, will probably let contract to George A. Dean, Andrews-Law Bldg., Spartanburg, for installing sewerage in mill houses.

S. C., Gaffney—Dr. W. C. Hamrick, Pres., Hamrick Mills, reported, will soon install sewerage in Alma, Hamrick and Musgrove Mills and Broad River Mills at Blacksburg.

Tenn., Murfreesboro—City voted sewer bonds. See Financial News—Bond Issues Proposed.

Tex., Borger—City will expend \$11,000 for sewer system. Address The Mayor.

Tex., Carrizo Springs—City voted \$88,000 bonds for sewer and water improvements. See Financial News—Bond Issues Proposed.

Tex., Freeport—City, R. D. Collins, Mayor, reported, plans constructing sewer system.

Tex., Marlin—City, J. M. Kennedy, Mayor,

reported, acquired site on Brazos River for construction of sewage disposal plant; \$80,000 available.

Tex., Mission—City, reported, let contract to Agar & Gentry, San Benito, for first unit of storm sewer system; cost \$13,000.

Tex., Pampa—City, T. D. Hobart, Mayor, let contract to Jordan Construction Co., Plainview, for sewer and disposal plant; cost \$110,000; install wood sewage pumps and motors.

Tex., Rotan—See Water Works.

Tex., San Antonio—City receives bids Dec. 5 for sanitary sewers in Prospect Hill; 25,000 ft. of 8-in., 2500 ft. of 10-in., 75 manholes; Fred Fries, Clk.

Tex., Spearman—City, R. L. McClellan, Mayor, let contract to Northwestern Construction Co., Casper, Wyoming, for disposal plant and sewage system; Bent Concrete Pipe Co., 3501 E. First St., Fort Worth, will furnish concrete pipe for sewer lines.

Tex., Waco—City, E. E. McAdams, Mgr., receives bids Dec. 6 for furnishing material, labor and construction of sewer system; J. H. Strange, City Engr. See Want Section—Bids Asked.

W. Va., Glendale—Norman Keffer, reported, interested in construction of new sewer system.

Shipbuilding Plants

Md., Baltimore — Bethlehem Shipbuilding Corp., J. M. Willis, Gen. Mgr., Sparrows Point, have tentative plans prepared by Baltimore office for plant addition on Key Highway; 1 and 2 story, steel construction, cost about \$1,000,000; await approval of main office, Bethlehem, Pa. 11-25-26

Md., Fairfield, Baltimore — Maryland Dry Dock Co., H. F. Brown, Vice-Pres., will add to present facilities; have purchased 9000-ton Crandall floating dry dock; will construct pier 900 ft. long, 60 ft. wide, install Terry crane, fire, water and air lines, dredge on both sides; extend width present 650-ft. pier 16 ft.; both wood piling and timber construction; pier contract awarded to Andrew Miller 3122 Foster Ave., dredging to Arundel Corp., Pier 2, Pratt St.; company do other construction.

Telephone Systems

Mo., St. Louis—Southwestern Bell Telephone Co., E. D. Nims, Pres., Southwest Bell Telephone Bldg., reported, plans erecting addition, 3810 Washington Ave. (Jefferson exchange); also plans \$60,000 addition (River-exchange), Colorado and Wilmington Ave.; 2-story, brick; receive bids probably about Mch. 1, 1928; I. R. Timlin, Ch. Archt.; W. O. Pennell, Ch. Engr., both 1010 Chestnut St. 11-3

Oklahoma—Southwest Telephone Co., 305 Rector Bldg., Little Rock, Ark., reported, acquired through Cammack & Co., 39 S. La Salle St., Chicago, Ill., exchanges in following towns: Manitou, Texola, Loco, Randlett, Comanche, Hastings, Chattanooga, Waggoner, Morris, Grandfield, Temple, Devol, Purcell, Erick, Prague, Meeker, Wetumka, Harrah and Tecumseh. 10-20

Okl., Enid—Southwestern Bell Telephone Co., main office St. Louis, Mo., reported, plans erecting 2-story and basement building addition, 32x40-ft., reinforced concrete, terra cotta, fireproof; receiving bids; I. R. Timlin, Archt., 1010 Chestnut St., St. Louis, Mo.

S. C., Kingstree—Continental Telephone Co., St. Paul, Minn. and Lincoln, Neb., reported, acquired the stock of Consolidated Telephone Co., of Kingstree and Lake City; will operate; O. K. Knell, Mgr., with headquarters in Toccoa, Ga.

Tenn., Knoxville—Southern Bell Telephone and Telegraph Co., main office Atlanta, Ga., acquired 2 sites, each 5x100 ft. on Broadway between Fifth and Magnolia Ave.; plans erecting new building. 11-24

Tex., Dickinson—Texas Associated Telephone Co., general offices San Antonio, reported, will take over property of League City and Dickinson Telephone Co.; install new equipment.

Tex., Marshall—Madison Telephone Co., reported, acquired toll line extending to Walnut and Bernard, about 10 miles.

Tex., San Marcos—San Marcos Telephone Co., Merton Swift, Mgr., reported, plans receiving new bids for erection telephone building; David C. Donaldson, Archt.; old bids rejected. 11-17

Tex., San Angelo—San Angelo Telephone Co., John Y. Rust, Pres., reported, plans

erecting 6-story, 76x130-ft. building, brick and reinforced concrete, stone, steel; complete plans about Dec. 15; Lang & Witchell, Archts., 300 American Exchange Bank Bldg., Dallas. 7-28

Va., Gloucester—East Coast Telephone Co., reported, purchased Gloucester Telephone Co., establish night telephone service, etc.

Va., Lexington—Lexington Telephone Co. increased capital \$50,000 to \$100,000.

Textile Mills

Ala., Anniston—Utica Knitting Co., Utica, N. Y., acquired plant of the Avalon Knitwear Co.; O. W. Gridley advises plans to take equipment over on Dec. 15 and have made arrangements for an additional building; will double output of plant. 11-24

Ala., Huntsville—H. Warren Redding of Sidney M. Edelstein & Co., Industrial Engrs., Union, reported, announced is representing a woolen fabric and garment manufacturer who will move plant from the East; will employ 225 people and will represent an investment of \$500,000.

Ga., Cedartown—H. K. Regar & Sons, Inc., Bridgeport, Pa., reported, acquired Barnes Knitting Co.'s plant from Charles Adamson; will establish southern unit of knitting company; will enlarge. Company wires: Confirm purchase Barnes Knitting Mills building and real estate; no new buildings at present; will renovate and improve present buildings for our use and install new machinery; commence operations Jan. 1.

Ga., Commerce—Gov. L. G. Hardman, Pres., Harmony Grove Cotton Mills, reported, announced will install 10,000 spindles and erect annex to present mill building; cost \$500,000; Robert & Co., Inc., Engrs., Atlanta, have completed plans for construction and installation; soon call for bids. Roberts & Co., wires: "Layout Harmony Grove not definitely settled and plans not yet begun."

N. C., Burlington—Holt Brothers Hosiery Co., Inc., capital \$150,000, incorporated; A. Glen Holt, W. K. Holt; will erect golf hosiery mill at Linsey and Ruffin Sts.; brick, mill type; install 50 special Banner machines with an additional 50 machines to be added later; Tilden Lutterloh, Contr.; May Hosiery Mill, selling organization.

N. C., Elkin—Chatham Mfg. Co., reported, opens bids Dec. 5 for addition to blanket manufacturing plant; 112x150 ft., 3 stories, brick and steel; cost \$100,000; Lockwood, Greene & Co., Engrs., Charlotte.

S. C., Honea Path—Gallivan Building Co., Gallivan Bldg., Greenville, has contract for additions to Chiquola Mfg. Co.; original contract called for 78x130 ft., which is now increased by addition of 4 bays, making total of extension 131x130 ft.; original plan to add 5000 spindles and complementary machinery has not been changed, but new space will allow for further machinery increases later; J. E. Sirrine & Co., Engrs., Greenville. 11-3

Tenn., Bemberg P. O., Elizabethton—John W. Cowper Co., Inc., Engrs. and Contrs., Buffalo, N. Y., who have contract for American Bemberg Corp. plant unit No. 2, has let following material and sub-contracts: Signal Mountain Portland Cement Co., Chattanooga, for portland cement; Marshall Bros. Lumber Co., Johnson City, for sand; Johnson City Shale Brick Co., Johnson City, for brick; Marsh & Truman Lumber Co., Hattiesburg, Miss., for lumber; Cole Iron Works, 1272 Murphy Ave. S. W., Atlanta, Ga., for miscellaneous and ornamental iron; Virginia Bridge & Iron Co., Healey Bldg., Atlanta, Ga., and Roanoke, Va., for structural steel; Knoxville Iron Co., Lonsdale, Knoxville, for reinforcing steel; Kalman Floor Co., Inc., 110 E. 42nd St., New York, for finished floors; Detroit Steel Products Co., 2250 E. Grand Blvd., Detroit, Mich., for steel sash; Western Waterproofing Co., Johnston Bldg., Charlotte, N. C., for waterproofing; Johns-Manville, Inc., Madison Ave. and 41st St., New York, for mastic floors; Armstrong Cork & Insulation Co., Candler Bldg., Atlanta, Ga., for cork insulation, and Loftis Heating & Plumbing Co., 440 Marietta St., Atlanta, Ga., for plumbing and drainage. 10-27

Tex., Port Arthur—Industrial Committee of Chamber of Commerce, reported, interested in establishment of cotton mill.

Tex., New Braunfels—Texas Gauze Mills, reported, plans constructing plant, 120x280 ft., steel and concrete construction; cost \$75,000. 10-20

Va., Winchester—Virginia Woolen Co., H. B. McCormac, Mgr., advises company plans building program to extend over a period of 3 years, which will result in addition of 100,000 sq. ft.; will construct building 60x150 ft., 4 stories, brick, mill type construction, to be first unit; will be designed and under

supervision of W. B. Goode or own organization; also will erect power plant having capacity of 12-1500 kw.; will purchase machinery to consist of looms, carding, spinning and finishing equipment; cost of buildings about \$300,000, and mechanical equipment will require expenditures of an equal amount.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that classification.

Ala., Tuscaloosa—City votes Jan. 16 on \$350,000 water works bonds to change water supply from Warrior River to Yellow Creek.

Ga., Griffin—City Commission, J. P. Nichols, Jr., reported, interested in construction of water system.

Ky., Paris—Paris Waterworks Co., capital \$200,000, incorporated; E. S. Mayes, F. M. Mayes, W. F. Grigsby.

Miss., Crystal Springs—R. S. Brent, Mayor, advises, will probably sell water and light plant.

Miss., Prentiss—Mississippi Power Co., Gulfport, reported, negotiating for purchase of municipal water and electric light plant.

Mo., Bolivar—City will vote on \$40,000 bond issue for improvement of water system. See Financial News—Bond Issues Proposed.

Mo., Cabool—City, voted bonds for water works system. See Financial News—Bond Issues Proposed. 10-27

N. C., Asheville—Trustees of Beaver Dam Water and Sewer Dist. of Buncombe County, R. E. Holcombe, Chmn., receives bids Dec. 5 for construction of water distribution system in Beaver Dam Water and Sewer Dist.; Howerton Engineering Co., Engrs., 410 Medical Bldg. See Want Section—Bids Asked.

N. C., Charlotte—Park Road Water Co., capital \$25,000, incorporated; W. F. Graham, H. G. Ashcraft, M. B. Query, all Park Rd.

N. C., Dunn—J. E. Beaman Construction Co., Lawyers Bldg., Raleigh, reported, has contract for improving water works. 11-17

Okla., Oklahoma City—City Council, reported, will lay water mains on 21st St., between Villa and Billen Avenues.

Tex., Carriazo Springs—See Sewer Construction.

Tex., Center—City, reported, will construct water tower at city reservoir to 108 ft. high; capacity 100,000 gallons.

Tex., Devine—American Well Works, Aurora, Ill., low bidder for pumping equipment and piping for municipal plant; Walton & Arneson, Engrs., Gunter Bldg., San Antonio. 11-10

Tex., Graham—City, reported, applied to State Board of Water Engrs., Austin, for permit to impound 5000 acre feet of water annually for domestic and industrial water supply; hearing set for Jan. 30.

Tex., Graham—City plans voting Dec. 6 on water bonds. See Financial News—Bond Issues Proposed.

Tex., Houston—City, James H. B. House, Water Commr., reported, plans extensive water works improvements; may issue bonds.

Tex., League City—Utilities Construction Co., A. E. Quay, Gen. Mgr., reported, interested in construction of modern water system in this city and installation of 110-foot water tower; cost \$10,000.

Tex., Lindale—City, reported, defeated bond issue. See Financial News—Bond Issues Proposed.

Tex., Lufkin—Chicago Bridge & Iron Works, Dallas, Tex., has contract for erecting 400,000 gal. elevated steel tank. 11-24

Tex., Rotan—Orman Construction Co., Pueblo, Colo., has contract for water and sewer system. 11-24

Tex., San Angelo—Concho Water Development Co., incorporated; J. C. Burnside, T. C. Atwood.

Tex., San Antonio—City, John W. Tobin, Mayor, reported, let contract to H. A. Palne Co., Cotton Exchange Bldg., Houston, at \$38,842 for third pumping unit for Market St. station. 1-4

Va., Alexandria—Alexandria Water Co. receives bids Dec. 12 for pumping machinery, etc. See Want Section—Bids Asked.

W. Va., Parkersburg—Layne-Atlantic Co., Seaboard Air Line Railway Bldg., Norfolk,

Va., has contract for constructing water works system. 11-3

Woodworking Plants

Ga., Donaldsonville—C. L. Smith, Headland, Ala., reported, plans establishing woodworking plant; manufacture sash, doors, cabinet work, etc.

Md., Baltimore—Southern Couch Manufacturing Co., 424-426 East Street, will erect 2-story, brick and steel warehouse at 431 Colvin St., 30x100 ft.; cost \$30,000; Stanislaus Russell, Archt., 11 E. Lexington St.; Abraham Goodman, Contr.

Md., Cumberland—Cumberland Box Co., F. P. Smith, will rebuild burned plant, install machinery for manufacture of wooden boxes and crates. See Want Section—Machinery and Supplies.

Miss., Greenville—Southern Stave & Lumber Co., capital \$25,000, incorporated; H. B. McCormick, E. D. Davis, H. B. McCormick, Jr.

N. C., Charlotte—Sterchl Brothers Furniture Co., capital \$100,000, incorporated; J. G. Sterchl, C. C. Rutherford, both 114 S. Gay St., Knoxville, Tenn.; Paul S. Kipping.

Tenn., Knoxville—Manard-Long Furniture Co., 118 W. Vine Ave., capital \$10,000, incorporated; S. O. Manard, 2311 Magnolia Ave.; Fred R. Long, 2003 Jefferson Ave.; A. J. Brown.

Tenn., Lewisburg—Houston & Liggett Co., W. A. Houston, Mgr., reported, will establish plant to manufacture closet linings and panels from cedar.

FIRE DAMAGE

Ala., Anniston—Chas. D. Kline's residence, 328 Leighton Ave.; loss \$5000.

Fla., Jacksonville—Florida Provision Company, 702 N. Bay St., building at southwest corner of Bay and Jefferson Sts.; loss \$14,000.

Fla., Sanford—Gulf Fertilizer Co.'s warehouse.

Ga., Andersonville—Kerfott Anderson's residence.

Ga., Decatur—Smith Bros. Feed and Fertilizer Co.'s warehouse; loss \$20,000 to \$25,000.

Ky., Ashland—Dwelling, Haney Addition, owned by John Tipton.

Ky., Hazard—Star Furniture Co.'s building on High St.; loss \$50,000.

La., New Orleans—Douglas Shoe Co.'s building, St. Charles St.

La., Winnsboro—E. & F. Cafe; Winnsboro Publishing Co.'s building; E. O. Strahan Jewelry Store; Pardue & Carter's meat market; Morgan & Lindsey's store; loss \$50,000.

Md., Baltimore—Dr. H. Lee Franks' residence, Hickory and Overlea Aves.

BUILDING NEWS

BUILDINGS PROPOSED

Association and Fraternal

Fla., Tallahassee—Suwannee River Council, Boy Scouts of America, has low bid at \$12,000 from Parker & Yeater for camp near Tallahassee; wiring bld, Quarterman Electric Co.; plumbing bld, Middle Florida Plumbing Co.; Alvin Moore, Archt., Centennial Bldg.

Ga., Rossville—Lodge No. 397, A. F. & A. M., erect 3-story brick temple, Chickamauga and McFarland Aves.; brick, 3 stories; stores on first floor, offices on second, lodge rooms on third; Jas. G. Gauntt, Archt., Hamilton Nat'l Bank Bldg., Chattanooga, Tenn.

Tex., Dallas—Dallas and Oak Cliff Chapters, Ku Klux Klan, erect clubhouse, Commerce St. Pike, Western Heights.

Tex., Wichita Falls—Lodge No. 1105, B. P. O. E., C. D. Shamburger, Chmn., Special Comm., plans lodge, building, Ninth St. and Travis Ave.

Bank and Office

Ala., Birmingham—Reeves Brothers Co., Martin Bldg., erect rein. concrete and brick office building, N. 15th Ave. and 50th St.; 2 stories, 40x70 ft., built-up roof, steam

Md., Cumberland—Cumberland Box Factory, Mary St., owned by Fulcher P. Smith; loss \$50,000.

Md., Sweet Air (R. D. from Baldwin)—William Albright's barn.

Miss., Clarksdale—Gin of Gotcher and Ratliff; loss \$18,000.

Miss., Iuka—Cotton gin of H. S. Massey; loss \$12,000.

Miss., Newton—Hickory High School, 10 mi. east of Newton; loss \$30,000.

Mo., St. Louis—Anchor Laundry Co.'s building, 2019 Lucas Ave.; loss \$15,000.

N. C., Elkin—Elk Inn operated by Mrs. J. E. Boles and owned by Gwynn Estate.

N. C., Caledonia—Barn at State Prison Farm; loss \$35,000. Address Geo. Ross Pou, Supt., State Prison, Raleigh.

N. C., Monroe—Building of the Monroe Enquirer, Blue Ribbon Barber Shop; loss about \$12,000.

N. C., Salisbury—Rowan County home near Salisbury; loss \$80,000 to \$90,000. Address Board of County Commrs.

N. C., Scotland Neck—Fertilizer house and corn crib at State Fair.

S. C., Greer—Building owned by Mrs. Lela W. Cunningham and M. L. Lanford, occupied by McLellan Fire and Ten Cent Store; loss \$50,000.

Tenn., Fowlkes—Ed Jones' business building; Dave Jones' building.

Tenn., Johnson City—Sells Manufacturing Co.'s flooring and ceiling plant; loss \$100,000.

Tex., Beaumont—V. Blanchette Bldg., Pearl and Bowie Sts.; loss \$75,000; L. Perl, Owner.

Tex., Beaumont—J. C. Penney & Co.'s store building; loss \$40,000.

Tex., Borger—Portion of refinery of Dixon Creek Oil Co., including eight 12,000 gal. storage tanks.

Tex., Dallas—M. Welborne King's residence, Highland Park.

Tex., Wichita Falls—J. C. Penney & Co.'s store and Mahaney's Cafeteria in building owned by Wiley Robertson and J. W. Stringer Estate; loss \$150,000.

Va., Cape Henry—Dwelling, Cape Henry Blvd., owned by R. H. Mapp, Norfolk.

Va., Lynchburg—A. S. White & Co.'s grocery store on Commerce St.

W. Va., Milton—City Restaurant owned by Charles Forth; Holley Bros. Department Store; loss \$45,000.

W. Va., Romney—Atlantic & Pacific Co.'s store, Hampshire Motor Co.'s building, Coffman & Fisher Co.'s store, Edward Oates' restaurant; loss \$50,000.

W. Va., Terra Alta—Terra Alta Lumber Co.'s sawmill on Madison Run.

W. Va., Wyatt—Paul Marra's warehouse, A. D. Hess' 4 houses, Mrs. Iva Gifford's house, Antonio Salino's store.

heat; Warren, Knight & Davis, Archts., 1603 Empire Bldg.

Ky., Latonia, Covington—Latonia Deposit Bank, Warren Elliston, Cashier, erect \$75,000 to \$100,000 building, Decoursey and Inez Aves.; 3 stories; offices on 2 upper floors; Richard Elliston, Archt.

Md., Easton—Isla Corp., care Elliott & McDaniel Co., remodel and erect addition to Moreland Bldg., for stores, offices and apartments; brick, semi-fireproof, 3 stories, 175x50 ft., composition floors, concrete foundation, composition and slate roof; cost \$75,000; Wm. Draper Brinckloe, Archt.; open bids in 3 or 4 weeks. See Want Section—Building Materials and Equipment. 11-24

Tenn., Chattanooga—American Trust and Banking Co., E. Y. Chapin, Pres., 738 Market St., probably have plans ready soon for bids on building, Eighth and Market Sts.; cost \$500,000, height greater than present 4-story structure, 60x150 ft., washed-air ventilating system, sound-deadening wall treatment; K. W. Vitzthum & Co., Inc., Archts., 307 N. Michigan Ave., Chicago, Ill.; Bearden & Crutchfield, Asso. Archts., Chattanooga. 10-13

Tenn., Knoxville—Morris Plan Bank, E. M. Kennedy, Sec.-Treas., 218 S. Gay St.,

erect bank building, W. Clinch Ave.; brick and stone, 2 stories or more.

Churches

Ark., Earl—Methodist Church considers brick and stone building; stone trim, steam heat; Hubert T. McGee, Archt., 801 Fidelity Bank Bldg., Memphis, Tenn.

Ark., Lepanto—Baptist Church, Rev. Cecil H. Franks, Pastor, erect \$20,000 brick veneer building; 2 stories and basement, wood floors, stone trim, composition shingle roof; Alsop & Callanan, Archts., U. & P. Bank Bldg., Memphis, Tenn.

Ark., Ola—Christian Church plans \$16,000 brick building; 1 story, stone trim, composition shingle roof. Address The Pastor.

Ark., Searcy—First Baptist Church remodel building; install organ; cost \$11,000. Address The Pastor.

Fla., Jacksonville—Calvary Baptist Church, J. W. Davis, Chmn. Bldg. Comm., erect building, First and Liberty Sts.; Mark & Sheftall, Archts., 210 Clark Bldg.; work soon start.

La., Crowley—Presbyterian Church plans \$75,000 building. Address The Pastor.

La., New Orleans—St. Dominic R. C. Church has low bid at \$16,690 from Dudley & Wike Construction Co., Stern Bldg., for alterations and additions to church and school and at \$5065 from Denegre & Woodward, Inc., Louisiana Bldg., for same to rectory; sprinkler system bid, H. N. Moody, 815 Perdido St., \$890; heating, American Heating and Plumbing Co., 829 Baronne St., \$1165; Wogan & Bernard, Archts., Title-Guarantee Bldg. 10-20

Miss., Byhalia—Methodist Church erect brick addition; 2 stories and basement, 63x32 ft., east stone trim, wood floors, composition roof; Alsop & Callanan, Archts., U. & P. Bank Bldg., Memphis, Tenn.; bids in.

Miss., Coldwater—Baptist Church erect \$10,000 building; brick veneer, 1 story; R. C. Springer, Archt., Meridian.

Miss., Summit—Methodist Church erect \$10,000 brick building. Address The Pastor.

N. C., Boone—Lutheran Church approved plans for \$25,000 building; brick, steam heat; Carl Messerschmidt, Archt., Mutual Bldg., Richmond, Va.

N. C., Hartsville—First Baptist Church plans Sunday school; tentative plans drawn. Address The Pastor.

N. C., Kinston—First Presbyterian Church, Rev. Irby Terrell, plans building.

N. C., Walnut Cove—Baptist Church, Rev. O. E. Ward, Pastor, erect \$20,000 brick building; auditorium seat 600, 30 classrooms.

S. C., Walterboro—Baptist Church plans building. Address The Pastor.

Tex., Amarillo—Baptist Church, care Rev. Miles W. Jenkins, erect building, North Heights; brick; cost about \$10,000; excavation contract let to McKnight's.

Tex., San Antonio—Westminster Presbyterian Church, Garden and Temple Sts., Rev. H. P. Bates, Pastor, having plans drawn by Adams & Adams, Archts., Bldrs. Exchange, for building; brick or stone tile, wood joists, stucco; ready for bids about Dec. 12. 10-27

Tex., Weslaco—Seventh Day Adventist Church considers erecting 1-story frame building. Address The Pastor.

City and County

Ark., Forrest City—City, Jas. L. Scott, Mayor, having plans for \$40,000 city hall drawn by Estes W. Mann, Archt., 203 Cotton Exchange Bldg., Memphis, Tenn.; brick, stone, steel and concrete, 2 stories and basement, about 45x120 ft., tile floors, stone trim, built-up roof, steam heat.

Ark-Tex., Texarkana—Miller County Arkansas, J. H. McClain, County Judge, considers remodeling courthouse; cost about \$50,000.

Ga., Augusta—City Council considers stadium.

Miss., Carthage—Leake County Board of Supervisors plans courthouse.

Miss., Corinth—City Commission, W. G. Mitchell, member, erect \$10,000 fire station; brick, stone trim, 2 stories, about 25x60 ft., concrete and wood floors, built-up roof.

N. C., Boone—Town, W. R. Gregg, Mayor, plans town hall and fire dept. building.

N. C., Forest City—City, Chas. Z. Flack, Mayor, selected Jas. J. Baldwin, Taylor Bldg., Asheville, as architect for \$20,000 to \$25,000 city hall; brick, 2 stories; bids in about 30 days. 10-20

Okla., Ardmore—City remodel jail after plans by E. S. Booze, 213 A St., N. W.; brick, 1 story, 36x115 ft., concrete floors, composition roof, cost \$19,000, including

equipment; S. P. Matthews, Engr., City Hall. 11-10

Okla., Oklahoma City—Oklahoma County Board of Commrs., Ed L. Sheldon, Chmn., receives bids Dec. 16 for old men's home at county poor farm; cost \$25,000; accommodate 40. 10-20

Tenn., Jackson—Madison County Court, Karl Milkes, Judge, Peoples Bank Bldg., let contract for \$15,000 workhouse to I. M. Haynes, Westwood; brick, concrete and steel, 2 stories and basement, 30x73 ft., concrete floors, built-up roof, fire escapes, fire doors; J. F. Parish, Archt., McCowart-Mercer Bldg. 11-3

Tex., Goose Creek—Harris County Board of Commrs., Houston, erect brick jail; 34x59 ft., 1-story; Hedrick & Gottlieb, Archts., Post-Dispatch Bldg., Houston; ready for bids.

Tex., Greenville—City, Paul G. Thompson, Mayor, votes Dec. 21 on \$100,000 auditorium bonds.

Tex., Perryton—Ochiltree County Commrs. Court, Dave Shanks, Clk., P. O. Box 468, selected Mann & Co., Hutchinson, Kan., as architects for \$100,000 courthouse, S. Main St.

Tex., Texas City—City, E. L. Noble, Mayor, having plans drawn for \$100,000 auditorium and city hall; rein. concrete, brick and hollow tile, 2 stories, 172x114 ft., cement, terrazzo and wood floors, rein. concrete foundation, 20-year composition roof; Page Bros., Archts., Austin Natl. Bank Bldg., Austin; M. L. Diver, Engr., Calcasieu Bldg., San Antonio. See Want Section—Building Materials and Equipment. 11-24

Dwellings

Ala., Birmingham—A. L. Able erect residence, 17th St. and Fulton Ave. S. W.

Ala., Birmingham—Diana Steiner erect \$20,000 residence, Argyle and Stratford Rds., South.

Ala., Birmingham—R. J. Weatherly, care C. H. McCauley, Archt., 708 Jackson Bldg., erect frame residence; 2 stories, composition roof, steam heat; bids in.

Ark., Osceola—Claude Thomason considers erecting some 2-story duplexes. See Want Section—Building Material and Equipment.

Fla., Coral Gables, Miami—W. L. Harris, 34 N. E. First Ave., Miami, erect \$35,000 residence and garage.

Fla., Coral Gables, Miami—A. F. Haessler complete residence; cost \$10,000.

Fla., Daytona Beach—Dr. J. Ralston Wells, Medical Arts Bldg., Philadelphia, Pa., and Woolworth Bldg., Daytona Beach, remodel residence, 917 Halifax Ave.

Ga., Atlanta—P. D. Christian, Healey Bldg., erect 10 brick veneer dwellings, 1000 and 1100 blocks Hawthorne Drive N. E.; 1-story, brick veneer; total cost \$40,000.

Ga., Atlanta—Robt. Tyre Jones plans residence.

Ky., Louisville—Harry Rosenbaum, 1501 Third St., erect \$20,000 brick veneer residence, 1412 Cherokee Rd.

La., New Orleans—J. E. Cockerhan, 940 St. Maurice St., erect 4 double cottages, St. Maurice and Rampart Sts.; total cost \$12,000.

La., New Orleans—Eleanora Banks, 408 Delery St., erect single residence, Alabo St., near Villere St.; composition roof.

La., New Orleans—Donald Maginnis remodel residence, 925 Burdette St.; cost \$26,000; Denegre & Woodward, Inc., Contrs., 702 Louisiana Bldg.

Md., Baltimore—Harry L. Dubbelde Co., 2407 Ellamont St., erect number dwellings, block bounded by Lombard, Pratt, Tenth and Eleventh Sts.; also erect dwellings, Ninth St.

Md., Baltimore—Roland Park Co., Roland Park, soon call for bids for 2 dwellings, E. side Springlake Way, Homeland; stone, 2½ stories, about 12 rooms and 3 baths each, cost \$25,000 each; Flournoy & Flournoy, Archts., 306 St. Paul St.; plans completed for 12 additional dwellings.

Md., Baltimore—Harry Page, 304 Ilchester Ave., erect \$11,000 residence and garage, 318 Tunbridge Rd., Homeland; stucco, 2 stories.

Md., Baltimore—John Welsh, 11 E. Fayette St., erect 9 frame dwellings, 3800 block Ridgewood Ave.; total cost \$25,000.

Miss., Holly Springs—Lester G. Fant, remodel residence; R. A. Heavner, Archt., Peoples Savings Bank Bldg., Jackson, Tenn.

Miss., Meridian—Sam Miller, Pres., Southern Building Material Co., Fifth St., started work on \$20,000 residence, Cherry St.; brick and hollow tile.

Mo., Kansas City—Redemptorist Fathers erect rectory adjoining church, Linwood Blvd.

and Broadway; fireproof, 3 stories, U shape, 97x26 ft. and 60x26 ft.; rein. concrete frame, Bedford stone exterior, slate roof, 22 sleeping rooms, 6 parlors, dining room, assembly hall, library, 20x40 ft. chapel; Maurice Carroll, Archt., 713 Linwood Blvd.

Mo., Kansas City—Max Skeer, 422 Bonfils Bldg., erect English type residence, 57th St. near Pennsylvania Ave.; Greenbaum, Hardy & Schumacher, Archts., 216 Scarritt Bldg.

Mo., St. Louis—Dayton H. Mudd, 6918 Washington St., erect \$85,000 French chateau type residence, 5900 block Lindell Drive; 11 rooms, 4 baths, garage.

Mo., St. Louis—M. B. Pattiz, care Jesse L. Bowling, Inc., Archt., 1198 Arcade Bldg., erect Georgian Colonial residence, Chevy Chase; brick, 2 stories and basement, 70x60 ft., L shape, 3 tile baths, slate roof, hot water heat.

Mo., St. Louis—E. R. Thomas, care Kennerly & Stiegemeyer, Archts., 1111 Title Guarantee Bldg., erect \$23,000 residence, Price Rd. near Olive St. Rd.; brick veneer, 2 stories and basement, 28x65 ft., concrete foundation, slate roof, oak floors, tile bath, vapor heat; bids in.

Okla., Ada—Catherine Brydia, M. D., American Bldg., erecting concrete foundation and basement of \$10,000 to \$16,000 residence by day labor; contract for remainder about Feb. 28; brick, 1 story, 61x51 ft., hardwood floors, asbestos roof; Albert S. Ross, Archt. See Want Section—Building Material and Equipment. 11-10

Okla., Chickasha—B. P. Smith erect \$18,000 residence; brick veneer, 2 stories; E. H. Eads, Archt.

Okla., Oklahoma City—Fred Patterson erect \$30,000 residence; hollow tile and stucco, 2 stories and basement, 34x68 ft.; Harry Reynolds, Archt., Mercantile Bldg.; plans complete.

Okla., Oklahoma City—C. A. Ratts, 1611 N. McKinley St., erect five \$5000 dwellings.

Okla., Tulsa—Robt. E. Adams, Exchange Natl. Bank Bldg., erect 2 brick dwellings, 1435-39 S. Gary Ave.; cost \$5000 each.

Okla., Tulsa—J. A. Bailey 1724 S. Detroit St., erect brick residence, 1617 E. 21st St.; cost about \$10,000.

Okla., Tulsa—Abbott & Welch, Tulsa Trust Bldg., erect 25 dwellings, Harvard Heights, in addition to 6-room brick veneer dwelling under construction at 12th St. and Jamestown Ave.; brick or stucco, electric refrigerators; sell for \$6000 to \$7000 each.

Okla., Tulsa—F. H. Pratt, Mayo Bldg., erect 4 frame dwellings, 1700 block S. Gary Place; cost \$3200 each.

Tenn., Knoxville—W. M. Fulton, 820 Temple Ave., erect residence, 20-acre tract, Lyons View Pike; Barber & McMurtry, Archts., Tennessee General Bldg.; landscaping by Chas. F. Lester and Mrs. H. D. Dunlap.

Tenn., Knoxville—Mortimer Thompson, Jr., erect brick veneer cottage, North Hills; M. E. Parmelee, Archt., Cherokee Bldg.

Tenn., Memphis—Gordon Craig, 716 Claredge Hotel, erect \$12,500 residence, Hein Park; painted brick, 1 story and basement, 60x48 ft., oak floors, composition shingle roof, tile bath, steam heat; Hubert T. McGee, Archt., Fidelity Bank Bldg.

Tenn., Memphis—Dr. J. D. Townner, Exchange Bldg., considers brick residence, Chickasaw Gardens; 1 or 2 stories and basement, tile or composition roof, oak floors, tile bath, steam heat.

Tenn., Memphis—Gunn Buckingham, 607 Center Drive, erect \$12,000 residence, Walnut Grove Rd.; stucco, 1 story and basement, oak floors, tile baths, shingle roof, steam heat; Geo. Mahan, Jr., Archt., 700 Amer. Bank Bldg.

Tenn., Memphis—M. H. Palmer, Fidelity Bank Bldg., erect \$15,000 residence, Chickasaw Gardens; English type, brick veneer, stucco, half timber and field stone, 2 stories, 56x20 ft., oak floors, tile bath, composition shingle or tile roof, hot-water heat; Polk W. Agee, Archt., 1315 Fidelity Bank Bldg.

Tenn., Memphis—R. E. Palmer, Fidelity Bank Bldg., having plans drawn by Polk W. Agee, Archt., 1315 Fidelity Bank Bldg., to rebuild burned residence; cost \$12,500; brick veneer, 2 stories and basement, oak floors, composition shingle roof, tile bath, steam heat, garage. 11-10

Tenn., Memphis—John R. Kinnie, 20 S. Second St., erect wide siding residence, Williamson sub-division; 1 story and basement, about 30x60 ft., oak floors, tile bath, composition shingle roof, hot water heat; Polk W. Agee, Archt., 1315 Fidelity Bank Bldg.

Tenn., Nashville—John K. Madden, Fourth & First Bldg., erect common and face brick veneer and stone residence, Ellendale Ave.;

2 stories, 44x55 ft.; Nevins & Oehmig, Archts., 85 Ind. Life Bldg.; bids in.

Tex., Beeville—Dr. J. H. Rice, City Natl. Bank Bldg., San Antonio, erect residence, south of Flournoy Park, St. Mary's St.

Tex., Brownsville—H. M. Skelton has plans completed by Page Bros., Austin Natl Bank Bldg., Austin, for \$25,000 hollow tile and stucco residence; 2 stories, Spanish type.

Tex., Bryan—Free Baptist Church, J. L. Edge, member, Bldg. Comm., plans parsonage, W. 27th and Congress Sts.

Tex., Dallas—Dr. R. B. Spurgin, Wilson Bldg., erect \$10,000 residence, 1208 Kessler Blvd.; brick veneer, 7 rooms.

Tex., Eastland—Dr. J. H. Caton erect brick and rein. concrete residence, and brick veneer garage; stone trim, 2 stories and basement, about 77.11x42.2 ft. and 36x21.8 ft.; wood, tile and concrete floors; David S. Castle Co., Archts., Alexander Bldg., San Antonio; bids in.

Tex., Edinburg—W. E. Dixon considers erecting 20 dwellings.

Tex., Fort Worth—Fred Hyer, Dan Waggoner Bldg., erect \$20,000 brick veneer residence, 1406 Thomas Place.

Tex., Fort Worth—H. Shropshire, 5129 Col-linwood St., erect brick veneer residence, 3721 W. Seventh St.; cost about \$10,000.

Tex., Fort Worth—Mrs. A. B. Smith, Flat-iron Bldg., erect \$15,000 residence, 3756 Tulsa Way; brick veneer.

Tex., Fort Worth—J. C. Williams, 808 Gal-veston St., erect 12 brick veneer dwellings, 2800 blocks N. W. 24th and 26th and 3100 block W. 27th Sts.; total cost \$92,000.

Tex., Fort Worth—R. E. Wright, 4618 Col-linwood St., erect brick veneer residence, 2440 Archer St.

Tex., Goose Creek—Christian Church, Rev. Jas. McSweeney, Pastor, plans parsonage.

Tex., Houston—Fred Wyse erect \$18,000 brick veneer residence, 1915 Hawthorne St.; 2 stories.

Tex., Houston—Miss Ester Gross erect \$11,500 residence, 2318 Isabelle St.; brick veneer, 10 rooms.

Tex., Houston—Sunset Court Realty Co., J. H. Rafferty, Pres., Rodgers Bldg., erect 5 dwellings, connection with development; cost \$8000 each; Mr. Rafferty, Constr. Engr.

Tex., Houston—L. T. Peden, Mgr., Smith Bros., Inc., 2403 N. Dallas St., erect brick veneer residence, Hyde Park; 12 rooms; H. A. Salisbury, Archt., Post-Dispatch Bldg.

Tex., Houston—W. I. Shotwell, River Oaks Blvd., erect \$21,000 residence, Crescent Island; 2 stories; A. E. Scott, Archt., 3611 Houston St.

Tex., Mercedes—Max Hassell erect \$10,000 duplex; 10 rooms.

Tex., Nacogdoches—Thos. E. Baker receiving bids at office Cornell G. Curtis and A. E. Thomas, Archts., 1603 Post-Dispatch Bldg., Houston, for brick veneer residence; cost about \$10,000, 2 stories, 35x42 ft. wood floors, rein. concrete foundation, composition or asbestos shingle roof, hot water heat; following contractors estimating: Hatchell & Kingman; E. D. Moorer; Chapman & Trimble, all Nacogdoches; Wm. A. Foster, Lufkin; J. C. Bartlett, Timpson. See Want Section—Building Material and Equipment. 11-24

Tex., Nacogdoches—Dr. Geo. P. Campbell receiving bids at office Cornell G. Curtis and A. E. Thomas, Archts., 1603 Post-Dispatch Bldg., Houston, Tex., for brick veneer residence; cost \$18,000, 2 stories, 43x64 ft., wood floors, rein. concrete foundation, hot water heat, tile, composition or asbestos roof; following contractors estimating: Hatchell & Kingman, Nacogdoches; Wm. A. Foster, Lufkin; J. C. Bartlett, Timpson. See Want Section—Bldg. Material and Equipment. 11-24

Tex., Nacogdoches—I. L. Sturdevant receiving bids at office Cornell G. Curtis and A. E. Thomas, Archts., 1603 Post-Dispatch Bldg., Houston, Tex., for brick veneer residence; wood floors, rein. concrete foundation, asbestos or composition shingle roof, hot water heat; following contractors estimating: Hatchell & Kingman; E. P. Moorer; Chapman & Trimble, all Nacogdoches; Wm. A. Foster, Lufkin; J. C. Bartlett, Timpson. See Want Section—Building Material and Equipment. 11-24

Tex., Raymondville—James Cole considers erecting 6 frame dwellings.

Tex., Rio Hondo—Mrs. Nina Youg considers erecting 2-story residence.

Tex., San Antonio—J. D. Irons, 830 W. Craig Place, considers erecting duplex in Spring, Eleanor St. and Margaret Ave.

Tex., San Antonio—Henry Judmeier, North Loop, erect frame and stucco residence and garage, Olmos Route, Olmos Park Heights.

Tex., San Antonio—E. M. Notzon, care Meliff-McAllister Lumber Co., 628 Buena Vista St., erect \$14,000 residence, 200 block Grammercy Place; hollow tile and stucco, concrete foundation, 2 stories, tile roof; Chesly N. Wood, Archt., 415 Dwyer Ave.

Tex., San Antonio—Mrs. Marion Roseberry, 349 Yale St., considers erecting residence in Spring; probably natural stone, 7 or 8 rooms, 2 stories.

Tex., San Benito—W. Y. Dawson erect frame residence; 2 stories, 9 rooms, 2 baths; J. Clyde & Percy W. Williams, Archts., Moore Bldg., San Antonio; owner receiving local bids.

Tex., San Benito—Stanley Dodds erect \$25,000 hollow tile and stucco residence; Spanish type, 2 stories, rein. concrete foundation, tile roof; Harvey P. Smith, Archt., Alaska Bldg., San Benito, and Natl. Bank of Commerce Bldg., San Antonio; Willard E. Simpson & Co., Engr., Natl. Bank of Commerce Bldg., San Antonio. Address Archt., San Benito. 11-24

Government and State

Ala., Montgomery—Constructing Quartermaster, Maxwell Field, has low bid at \$57,338 from A. C. Samford, Shepherd Bldg., for 13 non-commissioned officers' quarters and utilities. 10-27

Ark., Batesville—Arkansas National Guard, Col. Joe Harris, Adjt. Gen., Pine Bluff, having plans drawn by Witt, Seibert & Halsey, Archts., Texarkana, Ark.-Tex., for \$40,000 armory. (Archt. lately incorrectly noted.) 11-24

Ark., Little Rock—Arkansas National Guard, Joe S. Harris, Adjt. Gen., Pine Bluff, construct 17 mess halls, Camp McRea; work probably start in Spring.

Ga., Savannah—Following contractors estimating on medical officers' quarters, U. S. Marine Hospital, bids opened Dec. 19 by Treasury Dept., Washington, D. C.: Southern Construction Co., American Nat'l Bank Bldg., Pensacola, Fla.; Barge-Thompson Co., 136 Ellis St. N. E., Atlanta, Ga.; Batson-Cook Co., West Point, Ga.; W. D. Lovell, Minneapolis, Minn.; Algernon Blair, 11 S. Lawrence St., Montgomery, Ala.; D. F. Brandon, James Bldg., Chattanooga, Tenn.; King Lumber Co., Charlottesville, Va.; Wm. MacDonald Construction Co., Syndicate Bldg., St. Louis, Mo.; Virginia Engineering Co., Inc., 1102 Jefferson Ave., Newport News, Va.; Frank Wollard, Savannah, Ga.; J. E. Beaman Construction Co., Lawyers Bldg., Raleigh, N. C. 11-24

Miss., Vicksburg—Commanding Officer, Q. M. Dept., Jeffersonville, Ind., has bid at \$11,311 from M. & Q. Construction Co., Nashville, Tenn., for lodge, National Cemetery. 10-20

Tenn., Johnson City—Treasury Dept., Jas. A. Wetmore, Act. Supervising Archt., Washington, D. C., has low bid at \$16,749 from Chas. Weltz' Sons, Des Moines, Iowa, for remodeling and enlarging post office. 11-10

W. Va., Williamson—Additional contractors estimating on post office and courthouse; bids opened Dec. 8 in Washington, D. C.: Ward & Ward, South Charleston, W. Va.; Regan Construction Co., 2 E. Lexington St., Baltimore, Md.; Chas. H. Spring, Greensboro, N. C.; Green & Stowe, Welch, W. Va.; C. W. Hancock & Sons, Inc., Robson-Pritchard Bldg., Huntington, W. Va. 11-24

Hospitals, Sanitariums, Etc.

D. C., Washington—United States Veterans Bureau has low bid at \$11,898 (Item 1) from Bahen & Wright, 1223 New York Ave. N. W., for wall at U. S. Veterans Hospital, Mt. Alto.

Fla., West Palm Beach—Palm Beach County Board of Commrs. may call election on hospital bonds.

Ky., Dayton, Newport—Speers Hospital, Dr. J. L. Pythian, Trustee, plans to expend \$20,000 to improve hospital.

Md., Baltimore—Union Memorial Hospital erect \$500,000 unit, as gift from Frederick Bauernschmidt, to provide for low-pay patients; 6 stories with solarium on top floor, administrative offices and internes' quarters on first floor, 128 beds; probably brick; Jos. Evans Sperry, Archt., Calvert Bldg.

Miss., Jackson—State Hospital, Removal, Improvement and Land Sale Commission, R. L. Brown, Sec., Box 40, receives bids Dec. 7 for washed gravel and pit run gravel for construction and repair of roads and boulevards for \$4,500,000 Mississippi Insane Hospital, Whitfield; specifications on file at office Mr. Brown; N. W. Overstreet, Archt., Miss. Fire Bldg., Jackson; Henry C. Muskopf, Landscape Archt.-Engr., 864 Newport Ave., St. Louis, Mo. 11-24

Miss., New Albany—New Albany Hospital,

Dr. C. M. Speck, having plans drawn by Alsop & Callanan, Archts., U. & P. Bank Bldg., Memphis, Tenn., for \$20,000 building; brick veneer, 1 story, 60x120 ft., stone trim, wood floors, composition roof. 11-17

Miss., Oxford—Dr. J. C. Culley erect \$20,000 addition to hospital; 1 story and basement, stucco, hollow and interior tile; R. A. Heavner, Archt., Peoples Savings Bank Bldg., Jackson, Tenn.

Mo., Leeds—Kansas City, H. F. McElroy, City Mgr., has plans nearly completed by Madorie & Bihr, Archts., 1105 Continental Bldg., for \$65,000 negro unit at tuberculosis sanatorium; connected by passageway with existing building; brick and concrete, fireproof, 3 stories-150 ft. long, 74 beds, foundation to permit 2 additional stories. 8-11

Mo., St. Louis—Jewish Hospital, 216 S. Kingshighway, Aaron Waldheim, Pres., has \$300,000 gift for nurses' home from Mrs. Moses Shoenberg and son; accommodate about 200.

N. C., Winston-Salem—Winston-Salem Nurses' Assn., Miss Leilla Idol, Pres., plans home for graduate nurses.

Tenn., Oakville—Dr. L. W. Price, reported, erect \$200,000 addition to Oakville Sanitarium; 5 buildings; Jones & Furbringer, Archts., Porter Bldg.; Gardner & Howe, Engrs., Porter Bldg., both Memphis.

Tenn., Memphis—Crippled Adult Hospital, care Lem Banks, Chamber of Commerce Bldg., erect \$125,000 building, 2009 Lamar Ave.; brick, concrete and steel, 2 stories, 50 beds, concrete and wood floors, composition roof; Jones & Furbringer, Archts.; Gardner & Howe, Engrs., both Porter Bldg.

Tex., Cooper—Delta County votes Dec. 31 on \$50,000 hospital bonds. Address Commissioners' Court. 11-24

Tex., Houston—City, O. F. Holcombe, Mayor, and Harris County, H. L. Washburn, County Auditor, receive bids Dec. 14 at office City Sec. for general constr., heating, plumbing and wiring for nurses' home and administration building, Tuberculosis Hospital; cost \$50,000, 2 stories, 87x66 ft., frame, cement tile veneer and stucco, stone trim; plans by W. A. Dowdy, City Archt. 11-17

Tex., Houston—Methodist Hospital, San Jacinto and Rosalie Sts., Jesse H. Jones, member, Board of Trustees, has been authorized by Texas Conference of M. E. Church, South, to enlarge hospital or sell structure and erect new hospital.

Tex., San Antonio—Texas Psychopathic Sanitarium, Dr. C. C. Lemly, Waco, member, organized with \$250,000 authorized capital and plans 3-unit psychopathic hospital.

Hotels and Apartments

Ga., Atlanta—A. N. Canton advises will not build apartment house on Andrews Drive, defective title in lot. 11-24

Miss., Bay St. Louis—Bay St. Louis Apartment Hotel Co. opened bids for erection 3-story, 112x102-ft., hollow tile and cast stone trim apartment hotel; R. O. Weber, Gulfport, low bid at \$123,800; reinforced concrete foundation, composition and tile roof, plastered interior, sheet metal, ornamental iron, wood and concrete floors; Mason & Spurl, Archts., Vincent Bldg. 11-24

Mo., St. Louis—Alzheimer & Williams Realty Co., reported, erect apartment building, Belt St. and Cabanne Ave.

Mo., St. Louis—Margot Realty Co. plans \$100,000, 3-story, 24-family apartment, 4724 McPherson Ave.

Mo., St. Louis—U. Lurie, 3608 S. Grand Blvd., has plans and let contract to G. Sokol, 7069 Pershing Ave., for 2-story store and tenement, 4341-43 Shreve St.; 50x60 ft., brick, composition roof, steam heat.

Tenn., Chattanooga—W. E. Brock, 1111 Chestnut St., reported, planning erection \$400,000 apartment on Missionary Ridge.

Tenn., Knoxville—Seaton & Webb, Journal Arcade, erect \$21,000 apartment building, 1813 Laurel Ave.

Tenn., Memphis—W. H. Strother erect \$18,000 apartment building, 1002 Court St.

Tex., Crystal City—E. B. Taylor has plans by Will N. Noonan, Builders Exchange Bldg., San Antonio, for Cross-S Hotel annex; cost \$20,000; 2 stories, 40x100 ft., concrete, tile and stucco, fireproof; erect another addition later.

Tex., Fort Worth—Mrs. Nell Stanfield, 2104 Hemphill St., reported, erect \$200,000, brick and concrete, 2104-08 Hemphill St.

Tex., Galveston—Galveston Playhouse Corp., Ben Sass, Pres., 1925 L St., has plans by Hedrick & Gottlieb, Post-Dispatch Bldg., Houston, for San Luis Hotel, 22d St. and Boulevard; cost \$950,000; 330x74 ft., 6 stories, 250 rooms, 6 shops on ground floor on

Boulevard side, 22d St. side to have foyer, ice cream parlors and refrigerated air coffee shops, mezzanine floor for ballroom and convention hall, running ice water and stationary ceiling fans, roof garden with promenade, playground, gymnasium, swimming pools in basement, \$50,000 fireproof garage, filling station and accessory shop. 11-24

Tex., Galveston—Jake Davidson, 2928 J St., has plans by R. R. Rapp, Guaranty Bldg., to \$20,000, 2-story, brick veneer apartment building.

Va., Ocean View—Wells Ocean View Investments, Inc., Otto Wells, Dickson Bldg., Norfolk, reported, plans to have 100-room hotel built on Wells development, Spanish design, 3 stories, fireproof.

Va., Richmond—J. G. Hamm has permit to erect one-story brick veneer apartment building, 1136 Virginia Ave. N. E.

Va., South Boston—J. E. Galleher of Wheeler, Galleher & Co., Inc., 1007 E. Main St., and Thos. Gresham, both Hotel Richmond, Richmond, submitted plan for construction \$115,000 fireproof steel and concrete hotel, Main and Charles Sts., provided South Boston will issue \$25,000 in hotel bonds; 54 rooms, 2 stores, barber shop.

Miscellaneous

Ark., Fort Smith—St. Scholastica's Convent, Albert Pike Highway, having plans prepared by S. Redlich, Tulsa, Okla., for \$250,000 addition; chapel, library, gymnasium, swimming pool and art gallery; another addition is planned.

Fla., Valparaiso—El Quistador Golf Club, reported, plans \$500,000 hotel and clubhouse on Osceola Bay; Geo. L. Dick interested.

Ky., Louisville—Parkway Stables & Riding Club has permit to erect \$12,500, office and stables, 3900-04 S. Fifth St. and 507 Dresden Ave.; frame and stucco.

Mo., St. Louis—Adelbert von Gontard of Denny road, St. Louis County, announced plans for \$100,000 riding and hunting club on farm of Edw. L. Bakewell on Denny road.

Mo., St. Louis—Kriegshauser Undertaking Co., 4104 Manchester St., erect funeral home.

Mo., St. Louis—Missouri Stables, Inc., Elmer L. Musick, Pres., 1508 Federal Commerce Trust Bldg., reported, plans enclosure of present riding track, class and club rooms; cost \$50,000; Mauren, Russell & Crowell, Archts., Chemical Bldg.

N. C., Charlotte—American Playground and Recreation Assn., Dr. W. A. Parker, Dist. Dir., erect clubhouse.

Okla., Ponca City—Rock Cliff Country Club, Orville M. Savage, Chmn. Bldg. Comn., have plans ready about Dec. 1 for \$28,000, 2-story, 68x124 ft., native rock and concrete clubhouse; shingle roof, maple, oak and concrete floors; G. L. Cannon, Archt. 10-27

Tex., San Antonio—D. Leon Harp, 308 W. Summit St., reported, plans building, Elm and Nolan Sts.

Railway Stations, Sheds, Etc.

N. C., High Point—Southern Railway Co., B. Herman, Ch. Engr., Engr. Dept., Washington, D. C., erect \$8000, one-story, 30x0-ft., tin, wooden roof and \$10,000 2-story brick additions to freight warehouse.

Okla., Oklahoma City—Atchison, Topeka & Santa Fe Rwy. Co., H. W. Wagner, Ch. Engr., Topeka, Kan., reported, erect station.

Okla., Oklahoma City—Saint Louis-San Francisco Rwy. Co., F. G. Jonah, Ch. Engr., St. Louis, and Chicago, Rock Island & Pacific Rwy. Co., C. A. Morse, Ch. Engr., Chicago, reported, erect joint station.

Tex., Stinnett—Chicago, Rock Island and Pacific Rwy. Co., C. A. Morse, Ch. Engr., Chicago, reported, plans brick station.

Schools

Fla., Bartow—Polk County Board of Public Instruction, erect \$80,000 central grammar school on Wabash St. and \$45,000 brick school for negroes.

Fla., High Springs—High Springs School Dist. voted \$38,000 bonds. Address Alachua County Board of Public Instruction, Gainesville.

Fla., Homosassa—Homosassa School Dist. Trustees erect school building; \$36,000 bonds voted.

Fla., Tallahassee—State Board of Control, State Office Bldg., receives bids Dec. 12 for boys' dormitory and extension to dining hall at Florida Agricultural and Mechanical College for Negroes; cost \$100,000; plans and specifications at office Rudolph Weaver, 200 Peabody Hall, Gainesville. 11-24

La., New Orleans—Orleans Parish School Board, Fred Zengel, Jr., Pres., opened bids for alterations and 3-story brick addition to Jefferson Davis School; Caldwell Bros., 816 Howard Ave., low bid at \$188,000; E. A. Christy, Supvr. Archt. 11-3

Miss., Crystal Springs—Copiah County Board of Supervisors, Jack Sullivan, Supt., Hazlehurst, receives bids Dec. 5 for \$225,000, 3-story, reinforced concrete, brick and stone trim consolidated high school; built-up composition roof, structural iron and miscellaneous steel work, steam heat; plans and specifications at office Claude H. Lindsley, Archt., Lamar Life Bldg., Jackson. 11-17

Miss., Pittsboro—Chapel Hill Consolidated School Dist. votes Dec. 2 on \$14,500 school bonds. Address Calhoun County School Board.

Mo., Springfield—City plans vote before Jan. 31 on \$880,000 to \$1,250,000 for rehabilitation of public school system; G. G. Lydy, Pres., School Board; Charles A. Smith, Archt., Finance Bldg., Kansas City. 11-17

Mo., St. Louis—St. Elizabeth's Church, reported, erect \$200,000 school for negroes, 4465 Cook Ave.; 3 stories, 14 classrooms, auditorium to seat 1000. Address Archbishop John J. Glennon.

N. C., Harmony—Iredell County Board of Education erect 10-room and auditorium brick veneer addition to Harmony Farm Life School.

N. C., Mount Airy—Surry County Board of Education, E. S. Hendren, Supt., having plans prepared by John J. Blair, Raleigh, for schools at Low Gap, Zephyr, Mt. Zion and Canebroke; one story, 100x100 ft., tile and brick, asbestos shingle roof, concrete or brick foundation; \$72,000 available; probably let contract about March 1. 11-24

Okla., Enid—Board of Education has plans by R. W. Shaw for \$10,000, 2-story and basement, 70x90 ft., brick and reinforced concrete school building. 10-27

Okla., Norman—State Board of Affairs, G. C. Willard, Chmn., Oklahoma City, call for bids about Dec. 20 for \$500,000, brick, stone and reinforced concrete, fireproof Library Building; Layton, Hicks & Forsythe, Archts., Braniff Bldg., Oklahoma City. 9-8

Okla., Perry—City votes Dec. 6 on \$47,000 bonds to erect school auditorium to seat 1200 people and gymnasium. Address Board of Education.

Okla., Ponca City—Marland Industrial Institute has plans by J. Duncan Forsyth, Braniff Bldg., Oklahoma City, for \$150,000, one-story and basement educational building and \$125,000, 2-story and basement dormitory; brick, reinforced concrete, stone, hollow tile and stucco.

Okla., Stillwater—Sigma Nu Fraternity, Agricultural and Mechanical College, having plans prepared by F. W. Redlick, Tulsa, for \$50,000, 2-story, brick and stone fraternity house.

Tenn., Cleveland—School Board receives bids Dec. 6 for Second Ward School; 8 classrooms and auditorium to seat 300; plans and specifications at office Clarence T. Jones, James Bldg., Chattanooga. 11-3

Tenn., Knoxville—Board of Education, L. H. Spillman, Pres., erect Giffin and McCampbell schools; Barber & McMurry, Archts., General Bldg.; bids open Dec. 1.

Tenn., Memphis—Tennessee Department of Education, P. L. Harned, Commr., receives bids Dec. 19 for library and gymnasium buildings and extension to dormitory at West Tennessee Teachers' College; cost \$200,000; also receive bids probably same date for installation heating plant equipment and other repairs at Austin Peay Normal School, Clarksville.

Tenn., Murfreesboro—Middle Tennessee State Teachers' College, Dr. P. A. Lyon, Pres., erect \$200,000 girls' dormitory and observation building; Marr & Holman, Archts., Stahlman Bldg., Nashville. 8-25

Tex., San Antonio—St. Mary's University, Rev. Alfred Rabe, Pres., plans two \$100,000 additions to dormitory and \$100,000 science hall.

W. Va., Tanner—DeKalb District Board of Education, Francis G. Gainer, Sec., receives bids Dec. 5 for school building; bids separately and collectively on following items: Excavation, concrete and cement work, stone and affiliated masonry, rough carpentry and frames, structural and miscellaneous steel work, roofing and sheet metal work; plans at office Mr. Gainer, and E. C. Holmboe, Archt., Empire Bldg., Clarksburg.

Stores

Ala., Montgomery—C. P. & R. F. Anderson, 529 S. Hull St., have permit to erect \$10,000, 2-story brick building, 119-21 Commerce St., for stores and warehouse.

Ky., Murray—M. T. Morris, 314 N. Fourth St., erect 2-story brick building to replace burned structure. See Want Section—Building Materials and Equipment.

La., New Orleans—Wm. T. Nolan, Canal Bank Bldg., preparing plans for 24-apartment building, Prytania and Fourth Sts.; 2 stories and basement, frame and stucco, reinforced concrete foundation, plastered interior, composition roof.

Md., Baltimore—C. A. Grafton has plans by Harry E. Regart for \$35,000, 2-story, 55x42-ft., brick building, south side 25th St., west of Walpert Ave.; owner builds. sition and tile roof, steam heat, Murphy beds.

Miss., Blue Mountain—Dr. W. Robertson erect brick commercial building.

Miss., Jackson—J. A. Logue, 1604 W. Capitol St., has plans by Frank P. Gates, 507 Edwards Bldg., for \$20,000, one story brick store building, Hamilton St.

Mo., Exeter—A. D. Clarke, Archt., Rogers, Ark., preparing plans for rebuilding block recently destroyed by fire.

Mo., Poplar Bluff—Grover W. Dalton has plans by Byron Billings and Wade H. Klamberg, St. Louis, for rebuilding store, Main and Poplar Sts., for home of Dalton Furnishing Co.; cost \$165,000 to \$175,000; 3 and 4 stories, reinforced concrete, faced with stone, concrete and hardwood floors, mezzanine floor for office, 2 electric elevators, ornamental copper and art glass canopy over entrance, steam heat.

Mo., St. Louis—Mrs. Lavera Clundt, V.-P., Modern Tile Co., 1923 Olive St., plans business building, Olive St. and Leffingwell.

Mo., St. Louis—V. Kuhlman erect store building, S. Kingshighway and Chippewa St.

Mo., St. Louis—Maas & Steffen Co., 102-04 Locust St., reported, remodel 4-story brick building.

Mo., St. Louis—Albert Mayer, Pres., A. Mayer Realty Co., 4008 Gravois St., plans commercial building, S. Kingshighway Blvd. north of Tholoan Ave.

Mo., St. Louis—J. A. Walsh erect business building, Chippewa St. and Winona Ave.

Okla., Ada—F. G. Gay has plans by Albert Ross for \$18,000, 1-story, 125x40 ft., brick store building.

Tex., Beaumont—E. L. Wilson Hardware Co., 321 Pearl St., has plans by F. W. Steinman & Son, 411 San Jacinto Life Bldg., for 2-story and basement, steel frame building.

Tex., Dallas—Dr. R. W. Baird, 4105 Live Oak St., erect 2 one-story brick stores, 2722-24 Commerce St.; cost \$10,900.

Tex., Edcouch—S. L. Shore let contract to M. L. Irons, Mercedes, for \$15,000, one-story, 50x70-ft., brick store building.

Tex., Houston—Ben Susholtz, 1506 Dallas Ave., receiving bids for \$40,000, one-story, reinforced concrete, brick and stucco community store, W. Dallas and Taft Sts.; leased to J. H. B. Walker.

Tex., Junction—John Hankins has plans by W. E. Simpson, 412 Nat'l Bank of Commerce Bldg., San Antonio, for onestory and basement, 38x40-ft., brick or tile, reinforced concrete store building.

Tex., San Angelo—Curtis Deason has permit for \$15,000, 45x85-ft. brick building, W. Beauregard St. between Sam and Concho Sts.

Tex., San Angelo—R. Roemer has permit for \$13,500 brick building, Chadbourne St. between Avenue B and C.

Tex., San Antonio—J. B. Jarmon, 919 W. Summit St., erect \$15,000, one-story and balcony, 70x80-ft., brick, hollow tile and east stone trim store building, Ashby and McCollough Aves.; Morris & Noonan, Archts.-Engrs., Builders Exchange Bldg.; Gld Noel & Bros., Lessees.

Tex., San Marcos—J. C. Penney & Co., Inc., 330 N. 34th St., New York, ready for bids for alterations to Feltner Building; cost \$10,000; new front, floors.

Theaters

Va., Winchester—Shenandoah Valley Theaters Corp., Isaac Weinberg, Staunton, purchased Empire Theater, N. Cameron St., and Cameron Hall Bldg., Rouss Ave. and Cameron St.; remodel and redecorate Em-

pire Theater, raze Cameron Hall building and extend theater through to Rouss Ave.

Warehouses

Ga., Savannah—Wallis Paint Co., 41 Jefferson St., Fred C. Wallis, Pres., erect additional warehouse and showroom facilities.

Md., Baltimore—Southern Couch Mfg. Co., 431 Colvin St., has permit for \$30,000, 2-story, 30x100 ft., brick and steel warehouse, 424-26 East St.; Stanilaus Russell, Archt., 11 E. Lexington St.

Mo., Springfield—Long-King Furniture Co., 1196 St. Louis St., advise that they probably will not build for some time. 11-25

N. C., Charlotte—Sears-Roebuck & Co., Chicago, reported, plans branch house.

Tex., Beaumont—Stedman Fruit Co., Park and Bowie Sts., erect \$10,000, brick warehouse, Trinity and Bowie Sts.

Tex., Fort Worth—Montgomery Ward & Co., G. E. Crandall, V. P., Chicago, purchased 15-acre site on Camp Bowie Boulevard and plan to have \$2,000,000 building under construction by Jan. 15; 8 stories, 360x220 ft., 500,000 sq. ft. floor space, "U" shape, switch tracks between two wings; reinforced concrete, flat slab, steel sash, sprinklers.

Tex., Harlingen—Walter Verhalen Co., Republic Bank Bldg., Dallas, plans 200x500-ft. corrugated iron warehouse.

finish floors, slate and built-up roof, wood sash, concrete and brick foundation; Casey & Fant, Archts., N. Main St., Anderson; Lafaye & Lafaye, Asso. Archts., 1224 Sumter St., Columbia; work not started. 11-24

Tex., Brady—Church of Christ let contract to W. E. Maxwell, Box 241, for \$15,000 hollow tile and brick building; 1 story, 55x70 ft., concrete foundation, tile and composition roof, wood floors; Will N. Noonan Co., Archt., Bldrs. Exchange, San Antonio. 11-10

City and County

Miss., Biloxi—City, let contract to C. W. Johnson for fire station and community house. 11-17

Okla., Tecumseh—Pauly Jail Building Co., 2215 DeKalb St., St. Louis, Mo., has contract for 10 cells; Pottawatomie County jail. (Lately incorrectly noted under Tex., Tecumseh.) 11-24

Tex., Pharr—City let contract to A. Brown for \$10,000 city hall and jail; brick and concrete, 2 stories; fire dept. on first floor. 11-10

Tex., Santa Anna—City completed foundation for \$15,500 city hall; brick, stone trim, 2 stories, 30x60 ft., concrete, wood and textile floors; Elmer G. Withers, Archt., 1308 Dorothy Lane, Fort Worth; Edgerton & Furry, Contrs., Coleman. 11-17

Dwellings

Ala., Birmingham—Hobson & Crum, care Phillip S. Mewhinney, Archt., 1014 Woodward Bldg., erect brick veneer dwelling, Howard College Estates; 1 story, 27x45 ft., composition roof, hot air heat; Harrington Richardson, Contr., 2028 N. First Ave.

Ala., Birmingham—Sarah Atkins, 3602 Cliff Road, erect \$17,000 residence, Mountain Brook Estates; 2 stories, shingle roof, steam heat, Sigmund Nesselroth, Archt., 805 Garley Bldg.; J. O. Williams, Contr.

Ala., Birmingham—B. M. Chenoweth, Brown-Marx Bldg., let contract to J. F. Adams, 901 Cotton Ave., for brick veneer residence, Overlook Road, Milner Heights; 2 stories and basement, 60x56 ft., slate roof, steam heat; Miller & Martin, Archts., 911 Title Guarantee Bldg.

Ala., Birmingham—J. E. Johnson, care J. E. Sallie, Archt., 2109 N. Fifth Ave., erect \$15,000 residence, Redmont Park, by day labor; brick veneer, 2 stories, 40x38 ft., wood floors, composition roof, steam heat.

Ala., Birmingham—Harold R. Sanson, American Trust Bldg., let contract to J. O. Hayley & Sons, 611 Princeton Ave., for brick veneer residence, Redmont Park; 1 story, 30x150 ft., slate roof, steam heat, electric refrigerator, incinerator, garage and servants' quarters; Warren, Knight & Davis, Archts., 6003 Empire Bldg. 11-3

Ala., Hollywood—Carl Groover, 2827 Highland Ave., erect brick veneer, stucco and half timber residence; 1 story and basement, 33x62 ft., composition roof, tile bath, furnace; Brooke B. Burnham, Archt., 1921 Comer Bldg., Birmingham; day labor.

Ala., Hollywood—H. H. Hinrod, care Nelson Real Estate and Investment Co., 400 N. 21st St., erect brick veneer residence; cost about \$10,000, 1 story, composition roof, furnace heat; J. E. Sallie, Archt., 2109 N. Fifth Ave., both Birmingham; day labor.

Ala., Hollywood—Brooks Young, 1575 Druid Hill Drive, erect \$12,000 residence; hollow tile and stucco, 1 story, 42x59 ft., tile and built-up roof, furnace heat; Jacob E. Sallie, Archt., 2109 N. Fifth Ave., Birmingham; day labor.

Ala., Montgomery—Jake Aronov, 127 Bell St., erect 10 dwellings, Vonora St., by day labor; brick veneer, 1 story, 30x40 ft., 30x28 ft. and 32x40 ft., hardwood floors, composition roofs; total cost \$25,000; Harry I. Hirsch, Archt., Vandiver Bldg.

Fla., Jacksonville—L. J. Anderson, 412 Margaret St., erect \$10,000 residence, 2002 Post St.; brick veneer, 1 story; W. C. Yankee, Contr., 314 Marion St., South Jacksonville.

Fla., Miami Beach—Carl N. Fisher, 846 Lincoln Road, erect 5 dwellings, including one to cost \$125,000.

Ky., Louisville—Harry Rosenbaum and Saml. Rosenbaum, 1428 S. Second St., each excavating for residence, Cherokee Rd. and Willow Ave.; 8 and 9 rooms; total cost about \$55,000; Joseph & Joseph, Archts., Francis Bldg.

Ky., Mayfield—Edw. Gardner let contract to X. B. Wickersham, care Hubert T. McGee, Archt., 801 Fidelity Bank Bldg., Memphis, Tenn., for \$50,000 stone veneer residence; 2 stories and basement, 85x65 ft., oak floors, tile roof and baths, steam heat; stone to Christie Cut Stone Co., 2082 Elzy Ave., Memphis. 7-1

BUILDING CONTRACTS AWARDED

Association and Fraternal

Ark., Helena—Ancient Free and Accepted Masons, E. S. Dudley Chmn., Bldg. Comm., let contract for \$30,000 temple to E. T. Walker, 313 Ohio St.; brick, 2 stories, about 60x130 ft., concrete and wood floors, built-up roof, steam heat. 10-6

Tex., Port Arthur—Cosmopolitan Lodge, No. 872, A. F. & A. M., A. E. Scott, Chmn., Bldg. Comm., erecting \$200,000 temple; Wm. B. Ittner, Inc., Archt., 408 Board of Education Bldg., St. Louis, Mo.; Hickey & Harrington, Contrs., Petroleum Bldg., Houston. (Contrs. lately incorrectly noted in Builders' Exchange, San Antonio.) 11-17

Bank and Office

Ala., Mobile—Alabama State Docks Comsn. let contract to J. E. Eley, Brent Bldg., Pensacola, Fla., for rein. concrete office building; 2 stories, about 110x40 ft., wood floors over concrete, tile roof. 11-24

Md., Cumberland—Macfarlane Plumbing & Heating Co., Cumberland, has plumbing and heating contract for \$90,000 office building for Celanese Corporation of America; metal partitions, E. F. Hauserman Co., Oliver Bldg.; steel sash, Independent Erection Co., Ferguson Bldg., both Pittsburgh, Pa.; bar joist, Truscon Steel Co., Youngstown, O.; Geo. F. Sansbury, Archt.; Geo. F. Hazelwood, Contr., both Cumberland. 11-24

Miss., Lucedale—Mosler Safe Co., 1026 Hibernia Bank Bldg., New Orleans, La., has vault equipment contract for \$25,000 Bank of Lucedale; electrical work, Gates Electric Co.; roofing and sheet metal, Hamilton Bros., both Gulfport; plastering, National Plastering Co., M.-W. Bldg., Meridian; Claude H. Lindley, Archt., Lamar Life Bldg., Jackson; Z. Bailey, Contr., Gulfport. 11-24

Miss., Ocean Springs—Mosler Safe Co., 1026 Hibernia Bank Bldg., New Orleans, La., has vault equipment contract in connection with remodeling and enlarging work for Ocean Springs State Bank; Smith & Norwood, Archts., Gulfport, Miss. 3-31

N. C., Charlotte—Duke Power Co. erect 5-story building, S. Church St. bet. Mercantile Bldg. and Southern Power Co. building under construction; structure to provide entrance to both structures; elevators; contract will probably be let to J. A. Jones Construction Co., Realty Bldg.

Okla., Enid—Central National Bank, A. E. Stephenson, Pres., remodel and enlarge banking quarters; cost \$75,000; Hoggson Bros., Archts.-Contrs., 485 Fifth Ave., New York; work start about Jan. 1.

Okla., Shawnee—State National Bank of Shawnee let contract to G. L. Carr for \$200,000 bank and office building; 6 stories, 50x100 ft., stone and brick; first 2 floors for bank, 15 office suites on each of upper floors; E. J. Peters, Archt. 9-22

Tex., San Antonio—Smith Brothers Properties, Inc., 431 S. St. Marys St., erect \$2,000,000 store and office building, St. Marys and Villita Sts.; 31 stories, 137x72 ft.; first 6 floors, containing 19,000 sq. ft. floor space, to be occupied by mercantile firms; remaining section octagonal shape with 24 offices to floor for first 14 floors, next 5 stories to have 20 offices each, and remainder 9 offices each; first 6 floors of rein. concrete frame, remainder struct. steel frame; 33-ft. concrete footings in steel caissons, rein. concrete floor slabs; 6-ft. polished granite base, 3 stories faced with stone, and remainder of light colored brick with stone trim, vari-colored glazed tile roof; marble floor and wainscoting, patent plaster walls, ceilings, etc.; marble tile and terrazzo floors, hollow tile, 9 self-leveling automatic control high-speed elevators, searchlight; subway from building to Plaza Hotel, tube system to courthouse; Atlee B. & Robt. M. Ayres, Archts., Bedell Bldg.; McKenzie Construction Co., Contr., Travis Bldg.; plans ready about 30 days. 11-10

Churches

Ala., Oneonta—Baptist Church framing \$25,000 building; 3 stories, church 45x60 ft., Sunday school 30x66 ft., composition roof; furnishings, equipment, etc., \$5000; P. E. Burroughs, Archt., care Sunday School Board, Southern Baptist Convention, Nashville, Tenn.; steam heating and plumbing, P. S. Duckworth, Cullman, Ala.; electrical work, Alabama Power Co., Oneonta. 10-13

La., New Orleans—Second Church of Christ, Scientist, 630 Common St., let contract at \$16,929 to Chas. Gilbert, Balter Bldg., for remodeling building; Emile Weil, Inc., Archt., Whitney Bldg. 8-4

Md., Baltimore—St. Ambrose R. C. Church started work on \$300,000 English Gothic type building, Park Heights and Wylie Aves.; Woodstock seam face granite exterior, stone and marble interior, steel frame, 104x174 ft., terrazzo and oak floors, concrete foundation, slate roof; Maginnis & Walsh, Archts., Statler Bldg., Boston, Mass.; L. E. D. Gaudreau, Supvg. Engr., associated with Archts., 3458 Park Heights Ave.; M. A. Long Co., Contr., 10 W. Chase St., Baltimore. See Want Section—Building Material and Equipment. 11-17

Md., Cumberland—St. Marys R. C. Church let contract at \$191,500 to A. L. Will Co., 642 N. Centre St., Cumberland, for brick and stone building, Oldtown Rd.; 2 stories, 90x184 ft., wood floors, concrete foundation, slate roof; Hugh I. Kavanaugh, Archt., 913 N. Calvert St., Baltimore; Leander Schardt, Engr.; electrical work, Potomac Edison Co.; plumbing, Carrol Bros., 210 Virginia Ave., all Cumberland; steam heating not let. See Want Section—Building Material and Equipment. 11-24

Mo., Kansas City—Church of God, Rev. Fred Bruffett, Pastor, erect superstructure of building; brick, cut stone trim, Colonial type, cost \$30,000; auditorium and balcony seat 1000; J. H. Felt & Co., Archts., 300 W. 47th St.; Geo. Goodlander, Contr., 3436 Campbell St.

Mo., St. Louis—Blaine Avenue Tabernacle, 4200 Blaine Ave., erect \$15,000 building; brick, 1 story, 40x70 ft., composition roof; Parker Construction Co., Contr., 3406 Washington Ave.

Mo., St. Louis—Grace E. L. Church, Garrison and St. Louis Sts., has permit to alter 1-story brick church, 3121 St. Louis St.; cost about \$10,000; Kellermann Contracting Co., Contr., Victoria Bldg.

Mo., St. Louis—Holy Trinity R. C. Church, 14th and Mallinckrodt Sts., A. B. Russmann, Chmn., Restoration Comm., 3819 N. 23d St., let contract to Welsh Construction Co., 42 DeMenil Bldg., 119 N. Seventh St., to restore structure damaged by tornado; cost \$150,000; Aegeter & Bailey, Archts., 1904 Rwy. Exchange Bldg. 11-17

Mo., St. Louis—St. Luke's R. C. Church erecting \$175,000 building, Dale and Bellevue Sts., Richmond Heights, by day labor; stone and brick, 1 story and basement, 150x70 ft., stone, marble and terrazzo floors, slate roof, steam heat; Study, Farrar & Rothenheber, Archts., 1363 Arcade Bldg.; carpentry, L. W. Murphey, 3934-A Sullivan Ave.; millwork, Mechanics Planning Mill Co., 3742 N. Broadway; roofing, Fitzgerald Roberts Roofing Co., 6625 Delmar Blvd. 8-18

Okla., Maud—Baptist Church excavating for brick building. Address The Pastor.

S. C., Anderson—Building Supplies and Service Co. has steam heating and plumbing contract for \$13,000 Sunday school for Central Presbyterian Church; Casey & Fant, Archts.; C. M. Guest & Son, Contrs. 11-24

S. C., Columbia—Washington Street M. E. Church let contract to W. A. Cray & Son, 1226 Sumter St., for \$100,000 Sunday school; brick and stone, concrete and wood floors, 3 stories, 74x140 ft., tile, cement and wood

La., Algiers, New Orleans—John L. Foret, 623 Seguin St., erect single cottage, Alix and Vallette Sts.; receiving sub-bids.

Md., Baltimore—Mrs. Eva L. Kornmann erect \$10,000 brick residence and garage, 206 Paddington Rd.; 2½ stories, 49x35 ft., and 20x20 ft., slate roofs, hot-water heat; H. J. Westenhaber, Archt., 928 Harlem Ave.; Thomas & Cross, Contrs., 3220 Greenmount Ave.

Md., Baltimore—Carey W. Lindsay, 2104 Park Ave., erect \$14,000 brick residence and garage, 4609 Sprinklake Way; 2½ stories, 35x53 ft. and 18x20 ft., slate roofs, hot-water heat; Cyril H. Hebrank, Archt., 3 E. Lexington St.; H. W. Hitchcock, Contr., 1720 E. Lafayette Ave.

Md., Baltimore—John Dornbusch, 19 S. First St., erect 2 brick dwellings and garages, 200-04 S. Second St., Brooklyn; 2 stories, tin roofs, steam heat; H. L. Geis, Archt., Third and Washington Sts., both Brooklyn; owner builds.

Md., Baltimore—Baltam Realty Corp. erect \$15,000 residence, 1508 Lombardy Place; 2 stories, 77x37 ft., slate roof, hot water heat; H. A. Stillwell, Archt.; Peyton B. Strobel Co., Contr., 206 E. Lexington St.

Md., Baltimore—Geo. W. Schoenhals & Co., Munsey Bldg., erect 15 brick dwellings, 38th St. near Cedar Ave.; 2 stories; owners build.

Md., Baltimore—Otto F. Unger, 6 W. Franklin St., erect 3 frame dwellings, 5401-17 Chetelat Ave.; 1½ stories, 22x31 ft. and 25x38 ft., garages 18x18 ft., furnaces; total cost \$30,000; plans and construction by owner.

Md., Baltimore—Guy T. O. Holliday erect \$15,000 residence, Taylor Rd. near Charles St. Ave.; 2½ stories, 72x36 ft., hot water heat; Palmer, Willis & Lambdin, Archts., 513 N. Charles St.; Thomas & Cross, Contrs., 3220 Greenmount Ave.

Md., Baltimore—Peyton B. Strobel Co., 206 E. Lexington St., has contract for \$30,000 dwelling, Lombardy Place near Belvidere Ave.; 3 stories, stone and stucco, 9 rooms, 3 baths; Harold Appleton Stillwell, Archt.

Miss., Meridian—Louis Threefoot, 1115 Twenty-second Ave., let contract to T. V. Avera, care Archt., for residence; P. J. Krouse, Archt., M. & W. Bldg.; plumbing, Southern Plumbing Co., 22d Ave.; roofing, John Kirkland, 403 Twenty-fifth Ave.; plastering, National Plastering Co., M. & W. Bldg.; heating, Walter Kidder, 2109 Sixth St. 5-19

Miss., Pass Christian—Mrs. M. Harding, New Orleans, La., erecting \$15,000 residence, Beach Hurst.

Miss., Pass Christian—Col. J. J. Mills, Gulfport, erecting \$10,000 residence, Second St., near Magnolia Drive.

Mo., Clayton, St. Louis—E. A. Erker, 5527 Waterman St., erect \$14,000 brick residence, Moorlands; 53x21 ft.; J. E. Jennings, Contr.

Mo., Kansas City—R. L. Falkenberg & Co., 63d St. and Brookside Blvd., erect \$15,000 frame dwelling, 1240 W. 53d St.; 2 stories, 60x25 ft.; owner builds.

Mo., Kansas City—Nulf & Hansen Building Co., 425 W. 70th St. Terrace, erect 2 brick dwellings, 421-25 W. 67th St. Terrace; 2 stories, 35x36 ft.; total cost \$15,000.

Mo., Kansas City—Maude H. Loeb, care Lyman-Siemens Co., Contr., 1202 Scarritt Bldg., erect frame residence; 2 stories, 27x42 ft.; cost about \$10,000.

Mo., Kansas City—Harold D. Bell, 5433 Woodland St., started work on English farmhouse type residence, 2330 Wyncote Lane; half timber and stucco, shingle roof, 2-car garage; Hal A. Stonebraker, Archt., 300 W. 47th St.; A. Pharo Gage, Landscape Archt.

Mo., Kansas City—Leo F. Brady, 6123 Kenwood St., erect 4 frame dwellings, 6-18 E. 70th St.; 1 story, 22x44 ft.; total cost \$12,000; owner builds.

Mo., Kansas City—Frank J. Wagner, 6127 Charlotte St., erect 6 frame dwellings, 411-27 E. 69th St. Terrace; 2 stories, 22x32 ft. and 22x42 ft.; total cost \$19,000; owner builds.

Mo., Kansas City—Clark Investment Co., 3525 Broadway, erect 4 stucco dwellings, 6401-5-9 Chestnut and 6425 Hagerwood Rds.; 1 story, 25x32 ft.; total cost \$12,000; owner builds.

Mo., Kirkwood, St. Louis—Geo. M. Nickolau, 227 E. Clinton Place, erect brick residence, 1½ stories and basement, 30x38 ft., concrete foundation, composition roof, hot air heat, cost about \$10,000; Dan Mullen, Archt., 18 N. Meramec Ave., Clayton; Otto Flesch, Contr., 19 S. Maple St., Clayton.

Mo., Normandy Grove, St. Louis—A. Seib, care J. Chas. Mueller, Contr., 3528 Hebert St., erect \$13,500 residence, Florissant Rd.; brick, 2 stories and basement, 34x26 ft., oak

floors, stone foundation and porch, stone trim, slate roof, hot water heat; Nolte & Nauman, Archts., Fullerton Bldg., St. Louis.

Mo., St. Louis—Donald Danforth, Jr., Sec.-Treas., Ralston Purina Mills, let contract to E. A. Brunson Construction Co., 1976 Rwy. Exchange Bldg., for \$60,000 residence, 17 W. Brentmoor St.; stone, 2 stories and basement, 122x30 ft., oak floors, slate roof, 2 tile baths, steam heat; L. B. Pendleton, Archt., 73 DeMenil Bldg. 9-29

Mo., St. Louis—R. Z. Adams, 5908 Michigan Ave., erect \$15,000 residence, 6125 Dewey Ave.; brick, 2 stories and basement, 26x35 ft., oak floors, tile bath, composition shingle roof, hot water heat; J. E. Lemp, Contr., 5909 Michigan St.

Mo., St. Louis—J. A. Etter, 4716 Delor St., erect \$10,000 residence, 6111 S. Grand Blvd.; brick, 2 stories and basement, 24x37 ft., stone foundation, tile roof and bath, hot water heat, hardwood floors; owner builds.

Mo., St. Louis—Meler-Comfort Co., Seven Gables Bldg., Clayton, erect frame dwelling, York Village; 2 stories and basement, 27x32 ft., hardwood floors, composition shingle roof, tile bath, hot air heat, oil burner; Dan Mullen, Archt., 18 N. Meramec St., Clayton; owner builds.

Mo., St. Louis—Henry Dilschneider, 7563 Easton Ave., erect \$30,000 residence, Boland Drive, Moorlands; brick, 2 stories and basement, 52x33 ft., rein. concrete and hardwood floors, concrete foundation, tile bath, slate roof, oil burner, electric refrigerator; Hiram Phipps, Archt., 4162 Castleman Ave.; owner builds.

Mo., St. Louis—J. Dryden, 6205 Odell St., erect 2 brick dwellings, 4107-11 Miami St.; 2 stories and basement, 24x31 ft., oak floors, tile baths, asphalt shingle roofs; owner builds.

Mo., St. Louis—B. C. Wagner, 7350 Wellington St., erect 2 brick dwellings, 7350 Wellington St.; 1 story and basement, 24x43 ft. each, stone foundations, composition shingle roofs, hot air heat; total cost \$10,000; day labor.

Mo., St. Louis—Fredk. Fischer, 610 Chestnut St., erect \$25,000 brick residence, 5587 Lindell Blvd.; 3 stories, 61x57 ft., composition and concrete roof, hot water heat; Nolte & Nauman, Archts., Fullerton Bldg.; G. F. Bergfeld Co., Inc., Contr., 610 Chestnut St.

Mo., St. Louis—O. Wendt, 310 Commercial Bldg., erect 3 brick dwellings, 5038-42-44 Dewey St.; 1 story, 24x37 ft., composition roofs, hot-air heat; total cost about \$10,000; N. A. Joseph, Contr., 5013 S. 37th St.

Mo., St. Louis—L. Kopelow, 1215 N. 13th St., erect \$13,000 brick dwelling, 6219 San Bonita Sts.; 2 stories, 39x45 ft., tile roof, hot water heat; B. Shapiro, Archt., 4202 Holly St.; owner builds.

Mo., St. Louis—Milton H. Tucker, 5501 Waterman Ave., let contract for \$20,000 residence, Wydown Forest, to A. Haffschweille, 2037 Prairie Ave.; brick and tile, 2 stories, 20x83 ft., Keramik and oak floors, concrete foundation, slate roof; Manske & Bartling, Inc., Archts., 410 N. Euclid Ave.; Warren-Webster steam heating, Guarantee Heating Co., 1620 Chestnut St.; plumbing, John Mohr & Son, 4478 Delmar Ave.; electrical work in general contract.

Mo., University City, St. Louis—Lee Hunter, 4003 Flora Bldg., erect \$60,000 residence, West Maryland Terrace sub-division; English Georgian type, 90 ft. front, 15 rooms, 4 baths, interior steel and concrete floors covered with tile and inlay art composition material, flat tile roof, keeper's lodge, tennis courts, mirror pools, etc.; Edw. H. A. Volkman, Archt.; Victor Architectural & Building Co., Contr., both 4826 Delmar Blvd.

Mo., University City, St. Louis—John B. Dale, 3442 Chippewa St., erect \$15,000 brick residence, Davis Place; 2 stories and basement, 26x40 ft., rubble stone foundation, hardwood floors, tile bath, hot water heat, electric refrigerator; Howard & Finnley, Archts.-Constr. Supvrs., 1104 Int. Life Bldg., St. Louis; sub-bids in.

Mo., University City, St. Louis—L. E. Brockmeier, 5127 Lexington St., erect 2 brick dwellings and garages, 7226-7296 Stanford Ave.; 1½ stories, 33x34 ft., 34x47 ft. and 12x20 ft., tile and slate roof, hot water heat; total cost \$16,000; G. B. Wilmering, 1816a N. 19th St., Archt., for former; Chas. L. Mellert, Archt. for latter; owner builds.

Mo., University City, St. Louis—Henry Duisen, 1273 Delaware St., erect 2 duplexes, 7737-7745 Delmar Blvd.; brick, 2 stories, 28x50 ft., slate roofs, hot water heat; cost \$8000 each; owner builds.

Mo., University City, St. Louis—Dr. W. F. Hardy, care L. Pfeifferberger's Sons, 102 W. Third St., Alton, Ill., let contract to Century Realty & Construction Co., 6277 Delmar Blvd., St. Louis, for \$20,000 residence; brick,

2 stories and basement, 7 rooms, concrete foundation, oak floors, tile bath, vapor heat. 10-27

Mo., University City—Harry E. Kemp, care Arthur T. Grindon, Archt., 1198 Arcade Bldg., let contract to Berkley Construction Co., 6625 Delmar Blvd., for residence; brick, 2 stories and basement, 44x31 ft. 10-20

Mo., University City, St. Louis—Harry S. Wagner, care A. Hoffschwelle, Cont., 2037 E. Prairie Ave., erect \$12,000 brick residence, Washington Blvd.; 1½ stories and basement, 32x41 ft., concrete block foundation, oak floors, tile bath, slate roof, hot water heat; Manske & Bartling, Archts., 410 N. Euclid Ave.

N. C., Greensboro—Home Investment Co., laying foundation for 3 dwellings, Benbow Rd.; 6 rooms, frame siding, 2 stories, 24x35 ft., hardwood and pine floors, asphalt shingle roofs, cost \$3000 each; M. W. Lewis, Contr., 1504 Lovett St., Glenwood, plans additional dwellings. See Want Section—Building Material and Equipment. 11-24

Okla., El Reno—John Petree let contract to E. A. Skouby, Guthrie, for \$50,000 residence; brick veneer, 2 stories and basement; Harry Reynolds, Archt., Mercantile Bldg., Oklahoma City. 10-6

Okla., Tulsa—Stewart & Labbe, 213 Cole Bldg., have contracts for number single dwellings, duplexes and apartments; J. E. Stegall, Bldr., care owner.

Okla., Tulsa—C. V. Evans, 721 S. Phoenix St., erect \$10,000 residence, 1332 S. Houston Ave.; brick, 2 stories; Oklahoma Contracting Co., Contr., Kennedy Bldg.

S. C., Anderson—Appleton Manufacturing Co. let contract for 100 operatives' dwellings to Townsend Lumber Co., Anderson; 4 and 6 rooms; total cost \$135,000; plans additional 100 dwellings later; J. E. Sirrine & Co., Engrs., Greenville. 11-3

S. C., Greenville—W. D. Parrish, 318 Crescent Ave., started work on \$15,000 brick veneer residence; 2 stories, 48x55 ft., oak floors, brick foundation, composition shingle roof, steam heat; W. R. Ward, Jr., Archt., Walker Bldg.; Cox & Hodgins, Inc., Contrs., Emaxee Bldg.; electrical work, Huntington & Guerry, N. Main St.; plumbing, Edens & Moon, 204 Pendleton St. 11-24

S. C., Greenville—A. L. Straus, care Meyers-Arnold Co., 111 N. Main St., let contract to Day Building Co., Chamber of Commerce Bldg., for \$22,000 brick residence; 2 stories; W. R. Ward, Jr., Archt., Walker Bldg.; Webster system of heat, Pal Piping & Heating Co., S. Main St.; electrical work, Huntington & Guerry. 11-24

S. C., Marietta—Slater Manufacturing Co. let contract at about \$30,000 to Townsend Lumber Co., Anderson, for 8 dwellings for overseers; steam heat.

Tenn., Chattanooga—J. Frank Harrison, Pres., Chattanooga Bottle & Glass Mfg. Co., Alton Pk., started work on \$100,000 residence, Riverview.

Tex., Eagle Lake—E. L. Beckman let contract at \$10,400 to F. O. Crawford, Yoakum, for brick veneer residence; 1 story, oak floors, Eternit asbestos roof, rein. concrete foundation; Wm. Ward Watkin, Archt., Scanlan Bldg., Houston. 11-17

Tex., Harlingen—Weslaco Electric Co., Weslaco, has electrical work contract for residence under construction for Red Hinman.

Tex., Houston—O. P. Steeger, West Bldg., erecting brick veneer duplex, 1928 Harold St.; 2 stories, 10 rooms; cost about \$10,000.

Tex., Kerrville—Hal Peterson let contract at \$10,255 to Wright & McKenzie for Spanish type residence; plumbing and heating, W. B. Brown, \$2119; wiring, Roberts Electric Co., \$444, all Kerrville; 1 story, hollow tile and stucco, concrete foundation; Morris & Noonan, Archts.-Engrs., Builders Exchange, San Antonio. 11-17

Tex., McAllen—Chas. A. Rich let contract to E. B. Mathis for brick veneer residence; 2 stories and basement, 7 rooms.

Tex., San Antonio—Robt. S. Yantis, 1915 San Pedro St., let contract to John Westerhoff, 524 School St., for \$30,000 to \$35,000 limestone residence; rein. concrete foundation, 2 stories, metal lath and plaster interior, oak floors, tile roof; Harvey P. Smith, Archt.; W. E. Simpson & Co., Engrs., both Natl. Bank of Commerce Bldg. 11-24

Tex., San Antonio—Mrs. Amye Bozarth, 815 Park Hill Drive, East, erecting \$15,000 dwelling, Olmos Park Estates; frame and stucco, 2 stories, 8 rooms, concrete foundation, double garage; John M. Marriott, Archt., Frost Bldg.

Tex., San Antonio—R. P. Thomas, Gibbs Bldg., erect \$10,000 French type residence, Lullwood Ave., near McCollough Ave.; frame and stucco, 1 story, 7 rooms, concrete foundation; Wilson & Hugman, Archts., Texas Bank

Bldg.; S. A. Lynch, Contr., care Hillier-Deutsch-Jarratt Co., 1309 S. Flores St.

Tex., Sherman—Scott Gill started work on brick veneer residence, W. Belden St.; built-in features.

Tex., Sugar Land—W. T. Eldridge, Sr., let contract to Northern Construction Co. for residence, Sugar Land; frame, tile and stucco, 2 stories, 12 rooms; Wm. Ward Watkins, Archt., Scanlan Bldg., both Houston.

Hospitals, Sanitariums, Etc.

Ala., Birmingham—Following sub-contracts let for \$500,000 Hillman Hospital annex under construction: Rein. steel, Connors Steel Co., Empire Bldg.; struct. steel, Virginia Bridge and Iron Co., 3900 Eighth Ave. N.; interior partitions, Ibois & Clark; roof and sheet metal, Geo. F. Wheelock Co., 2313 Ave. E.; lathing and plaster work, D. W. Epperly Plastering Co., 409 N. 24th St.; orna. iron, Birmingham Ornamental Iron Co., Inc., Age-Herald Bldg.; elevators, Otis Elevator Co., 2310 Third Ave. N.; plumbing, heating, wiring and ventilating, Alabama Supply Co., 831 N. 20th St., all Birmingham; painting, William Wilson Co., Bond Allen Bldg.; form work, Hugh J. Baker Form Co., Atlanta Trust Bldg., both Atlanta, Ga.; cast stone, Loeb Stone Co., 860 S. Bellevue St.; glass and glazing, Binswanger & Co., 635 Union St.; marble, tile, terrazzo and slate, Malone & Scott Tile and Marble Co., 353 Walnut St., all Memphis, Tenn.; exterior masonry, Bush Building Co., Eighth Ave. N., Nashville, Tenn.; metal cases and utility rooms, Art Metal Construction Co., Jamestown, N. Y.; elevator fronts and cabs, W. S. Tyler Co., Superior Ave. and E. 36th St., Cleveland, Ohio; millwork, McPhillips Manufacturing Co., Mobile, Ala.; metal bucks and trim, Aetna Steel Products Corp., Brooklyn, N. Y.; weatherstripping, Chamberlin Metal Weather Strip Co., 205½ N. 21st St., Birmingham; hardware, Mid West Hardware Co., 56 W. Randolph St., Chicago, Ill.; Harry B. Wheelock, Archt., Steiner Bldg., Birmingham; Percy W. Swern, Consit. Archt., 19 S. La Salle St., Chicago; A. J. Krebs Co., Contr., Walton Bldg., Atlanta. 10-20

Ga., Augusta—City let contract at \$135,000 to H. B. Nelson Construction Co., Atlanta, for nurses' home, University Hospital; rein. concrete frame, face brick, 3 stories, mastic floors, concrete foundation, Barrett specification roof; Scroggs & Ewing, Archts., Lamar Bldg. 11-17

La., New Orleans—J. Ed Hemenway, 4130 Baudin St., has pile-driving contract for \$200,000 James M. Batchelor Bldg. for Presbyterian Hospital; Rathbone & DeBuys, Archt., Hibernia Bldg.; Thos. M. Brockman, Contr., Hibernia Bldg. 11-24

La., Ruston—Ruston-Lincoln Sanitarium, W. S. Moore, member Bldg. Comm., let contract at \$39,575 to F. C. McClanahan, Homer, for concrete and brick sanitarium; 4 stories, concrete floors; furnishings, equipment, etc., \$10,000. 9-20

Md., Mount Wilson—Mount Wilson Tuberculosis Sanatorium excavating for brick building; fireproof floors, 3 stories, 208x90 ft., slate roof; Buckler & Fenhagen, Archts., 325 N. Charles St.; Henry Massart, Engr., 328 N. Charles St., both Baltimore; North-Eastern Construction Co., 612 Lexington Bldg., Baltimore, general contract at about \$150,000, exclusive of mechanical equipment. 11-24

Miss., Jackson—State Hospital Removal, Improvement and Land Sale Commission, R. L. Brown, Sec., Box 40, let contract at \$52,697 to C. A. Hunter, Alexandria, La., for plumbing and heating and at \$8569 to Gates Electric Co., Gulfport, Miss., for wiring for buildings for \$4,500,000 Mississippi Insane Hospital, Whitfield; N. W. Overstreet, Archt., Miss. Fire Bldg., Jackson; Henry C. Muskopf, Landscape Archt.-Engr., 864 Newport Ave., St. Louis, Mo. 11-24

Hotel and Apartments

Fla., Jacksonville—E. T. Evans, 216 Main St., let contract to Neal D. Evans, 216 Main St., for \$15,000, 2-story, brick veneer apartment building on Donald St.

Fla., Jacksonville—C. O. Little, Atlantic Natl. Bank, let contract to A. L. Watkins, 1430 Springfield Blvd., for \$10,000, 2-story, brick veneer, 4-apartment building, Robinson St. between Herschell and Orange Park road.

Ga., Atlanta—Fitzhugh Knox, 809 Morris Bldg., begun work on 3-unit apartment building, Peachtree road and Andrews drive.

Miss., Brookhaven—D. F. Gilly let contract to Lee McDavitt, New Orleans, La., for additions and improvements to Inez Hotel; cost \$80,000; 3 stories, brick, 80 rooms, restaurant and coffee shop, 3 stores, passenger elevator.

Mo., Kansas City—Ground Development Co., 1302 Commerce Bldg., has permit for \$350,000, 11-story, brick and concrete apartment hotel, 915 Linwood Blvd.; owner builds.

Mo., Ozark Beach—Ozark Beach Resort Co., finished concrete work on \$35,000 resort hotel; material and equipment purchased; plans by H. C. Crist, include 45x123 ft. structure, 3 stories, concrete and frame; concrete foundation, hot-air furnace. 11-17

Mo., St. Louis—Sam Koplar, Builder, erect apartment house, Lindell Blvd. and Euclid Ave.

Mo., St. Louis—J. B. McGinty, 6635 Delmar Blvd., let contract to V. H. Rhodes, same, for 2-story, brick tenement, 5475 Cabanne St.; F. G. Avis, Archt., 1019 Big Bend Road.

Mo., St. Louis—A. Morganstern, 1152 Bayard St., has plans by and let contract to D. M. Morganstern, 5005 Nottingham St., for two 2-story tenements, 5861-70 Roosevelt Place; cost \$18,000; 34x52 ft., brick, composition shingle roofs, hot air heat.

Mo., St. Louis—H. Wegener, 3230 Michigan St., let contract to B. Tonies & Sons, 520 N. 24th St., East St. Louis, Ill., for \$15,000, 2-story, 37x52-ft. tenement, 5405-7 Rhodes St.; brick, asphalt, shingle roof, hot air heat.

Mo., St. Louis—W. & C. Brinkop, 3621 S. Grand Blvd., let contract to K. W. Moses, 3643 Bowen St., for six 2-story tenements, 4106-26 Minnesota St.; cost \$36,000, 25x47 ft., brick, tar and gravel roofs, furnace heat.

Mo., St. Louis—Jos. A. Muldoon, 6165 Delmar Blvd., let contract to C. E. Hamilton, 411 N. Seventh St., for \$100,000, 3-story Therese Building, 6165 Delmar Blvd.; 3 stores and eight 4 and 5-room apartments; building financed and will be managed by A. W. Alexander.

Mo., St. Louis—C. Boehne, owner-builder, 4215 Margretta St., has plans by M. H. Finck, 4219A Margretta St., for three 2-story, 34x45 ft., brick tenement, 3048-58 Fair St.; cost \$28,500; slate roofs, hot-air heat.

Mo., St. Louis—Lenore R. & I. Co., 722 Chestnut St., let contract to J. M. Liebowitz, same address, for \$30,000, 3-story, 50x120 ft., brick tenement, 3915-25 W. Florissant St.; asphalt roof, steam heat; C. E. Etz, Archt., 110 N. Seventh St.

Mo., University City, Sta. St. Louis—Uda Lurie, owner-builder, 3608 S. Grand Blvd., has plans by Geo. Sokol, 7069 Pershing Road, for \$20,000, 2-story, 50x60 ft., 4-family, brick apartment building, 7375 Delmar Blvd.; composition shingle or slate roof, steam heat.

N. C., Charlotte—James A. Lockhart, Law Bldg., started work on two 2-story, brick veneer, 4-apartment buildings, West Blvd. and S. Tryon St.

Tenn., Nashville—O. F. Usher, Contr., 1202 Pennoek Ave., completed foundation for \$16,000, 2-story and basement, 37x47 ft., 4-apartment building, 200 Reidhurst Ave., for Bringhurst-Reid Co., 509 Church St.; electric work, R. L. Putnam, 2402 McDonnell St.; plumbing, Harvey Malone, 199 Manchester Ave.; concrete block foundation, Carey roof. 11-26

Tex., Corpus Christi—Smith Bros. and Nixon and Associates let contract to McKenzie Construction Co., Travis Bldg., San Antonio, for \$600,000 Plaza Hotel to be leased by Plaza Hotel Co., care Jack White; 12 stories, 200 rooms, reinforced concrete, brick, cast stone or terra cotta trim; Adams & Adams, Archts., Builders Exchange, San Antonio.

Tex., Houston—Fruit & Fruit let contract to W. Lewis for \$17,750, 2-story, brick veneer, 8-apartment building, 1528 W. Main St.

Va., Ocean View—Ocean Holding Co., Inc., let contract to Miller Engineering Co., Royster Bldg., Norfolk, and 815 15th St. N. W., Washington, for New Ocean View Hotel; cost \$600,000 to \$700,000. Colonial type, 3 stories, concrete and steel, stucco, 200 rooms with bath, 300 ft. frontage on Chesapeake Bay; Milburn, Heister & Co., Archts., Hill Bldg., Washington, D. C.

Va., Richmond—Davis Bros., Inc., 1716 Summit Ave., awarded all contracts and started work on \$250,000, 4-story, 76x120 ft., steel and concrete apartment building, Grace and Franklin Sts.; equipment, \$25,000; concrete foundation, 5-ply asphalt composition roof; L. Otis Spiers, Archt.-Engr., 1716 Summit Ave. 11-24

Miscellaneous

D. C., Washington—Commissariat of the Holy Land let contract to Schneider-Spliedt Co., 1416 F St. N. W., for \$21,000, 1-story, brick and concrete boiler house; concrete foundation, concrete slab roof; Murphy & Olmstead, Archts., 1413 H St. N. W.; Geo.

A. Weschler, Engr., 1010 Vermont Ave. N. W. 11-24

Tenn., Kingsport—Hamlett-Dobson Undertaking Co. let contract to J. M. Cross & Son for one-story, 38x60 ft., brick funeral home, Charlemont St., between Broad and Watauga Sts.

Tex., Fort Worth—Board of Directors of Fort Worth Water Improvement District No. 1 will probably call for bids in March on construction of dams and reservoirs to care for flood waters in city and adjacent points in Trinity River Valley; total expenditure proposed \$6,500,000. 11-10

Tex., Houston—Alexander Bale let contract to Don Hall, Cotton Exchange Bldg., for \$60,000 community market, 4222 Main St.

Schools

Ala., Birmingham—H. K. Ferguson & Co., Contrs., Title Guarantee Bldg., started work on administration building and 2 dormitories at Payne University; cost \$125,000, brick, tile back-up walls, stone trim, built-up roof; Daniell & Beutell, Healey Bldg., Atlanta, Ga. 6-30

Fla., Lakeland—Polk County Board of Public Instruction, Bartow, let contract at \$29,000 to Streeter Bros., Lake Hills Blvd., and Berg & Marshall at \$41,000 for 2 schools; D. E. Dorsett, heating and plumbing; plans by Mendenhall and Mendenhall, 311 E. Main St., and Potett & Witworth, 101½ N. Kentucky St.; include 2 stories, 12 and 18 rooms, brick, wood floors, brick foundation, built-up roof; A. D. Holtsinger, Archt., Bartow. 6-23

Fla., Tampa—Hillsborough County Board of Public Instruction let contract at \$44,235 to B. E. Oatley, 1217 Tampa Bay Blvd., for addition to Ballast Point Junior High School; one-story, brick, tile roof, cafeteria, manual training room, 3 classrooms, dining rooms for boys and girls, lockers and showers; Frank C. Gallher, Archt., Zack and Ashley Sts. 11-10

Ky., Silver Grove—L. C. Powers & Sons, Contrs., Pineville, started work on \$65,000, 10-room, fireproof brick graded and high school building. 10-6

Md., Baltimore—Johns Hopkins Medical School, Dr. Lewis H. Weed, Dean, let contract to Consolidated Engineering Co., 20 E. Franklin St., for Welch Medical Library, Monument and Wolfe Sts.; building to cost \$397,000; total cost \$600,000 to \$700,000, including book stacks; Renaissance architecture; offices, catalogue rooms, serial record room, photographic department on first floor; formal lobby, reading room 75x39 ft., formal room used for lectures, receptions on second; third floor for department of history of medicine, including exhibit hall, lecture room to seat 100 persons; rear portions of building to house stacks for storage of books, stacks rising from basement to roof, separated in eight tiers and provide room for 400,000 to 500,000 volumes; Edw. L. Tilton, Archt., 141 E. 45th St., New York. 11-3

Mo., Shelbyville—Board of Education let contract at \$31,992 to G. A. Rector, 407 Main St., St. Joseph, for school building; plumbing and heating, \$7593, Judd Heating & Plumbing Co., Kansas City, Mo.; electric work, Lester Howerton. 10-13

N. C., Concord—Cabarrus County Board of Education, S. Glenn Hawfield, Sec., let contract at \$30,000 to J. L. Beam, Albemarle, for 12-room elementary school in South Kannapolis; plumbing, E. B. Grady, \$1871; heating, C. W. Christian, Myers Park, Charlotte, \$3588; M. R. Marsh, Archt., 509 Builders Bldg., Charlotte. 9-29

N. C., Durham—Board of Education, F. M. Martin, Supt., let contract at \$111,485 to Consolidated Construction Co., 418 Cleveland St., for Hayti negro school; heating, \$13,570, Dermott Heating Co., 314 Morgan St.; plumbing, \$8971, O'Dell Small Plumbing Co., 318 Morgan St.; fireproof, brick, concrete and steel.

N. C., Greenville—Greenville Graded School Dist. Trustees let contract to T. A. Mitchell, First Natl Bank Bldg., Kinston, for \$100,000, steel, brick and limestone building. 10-27

Okla., Shawnee—Oklahoma Baptist University let contract to W. S. Scott, Sulphur, for \$200,000, 3-story and basement, 240x80 ft., steel, concrete and brick dormitory; concrete floors and foundation, composition roof; Joe I. Davis, Archt., First Natl. Bank Bldg., Oklahoma City. 11-17

Tenn., Madisonville—Monroe County Board of Education let contract to Watson Lumber Co. for 3-teacher school building at Nauchee; soon call for bids for 4-teacher school at Mount Vernon.

Tenn., Martin—N. B. Williams, Contr., 128 Church St., started work on Home Economics Building and Science Hall, University of

Tennessee Junior College; cost \$70,000; Abe Burchard, heating and plumbing; plans by Barber and McMurry, General Bldg., Knoxville, include one and two stories, brick, wood floors, concrete foundation, slate or tile roof. See Want Section—Building Material and Equipment. 11-10

Tex., Arlington—North Texas Junior Agricultural and Mechanical College, P. L. Downs, Jr., Chrmn. Bldg. Comm., Temple, let contract to R. F. Ball Construction Co., Fort Worth, for science hall; cost \$110,000; electric wiring, J. M. Johnson & Co., 508 N. Akard St.; plumbing and heating, A. S. Pearce & Son, 510 N. Hawkins St., both Dallas. 11-10

Tex., Longview — Longview Independent School Dist., H. S. Turner, Chmn. Bldg. Comm., let contract at \$98,827 to Christy-Dolph Construction Co., Central Bank Bldg., Dallas, for 2-story, 190x63 ft., brick, reinforced concrete, stone, fireproof high school; electric work, Hensley Electric Co., 2243 N. Main St., Fort Worth; Elmer G. Withers, Archt., Holmes Bldg., Fort Worth. 11-17

Tex., Wharton—School Board, W. D. Hutchins, Pres., let contract to erect \$11,500 school building for negroes; 7 classrooms, auditorium and library.

Stores

La., New Orleans—736 Realty Co. let contract to W. Horace Williams Co., Southern Bldg., for \$12,000, 26x90 ft., 3-story, concrete store building, 736 St. Charles St.

La., Shreveport—Drs. T. E. Williams and L. H. Pirkle, both 710½ Cotton St., have permit to erect \$18,000, 1-story, brick, 3-store building, 2628-32 Greenwood Road; R. G. Shisler, Contr., 2763 Fairfield Ave.

Miss., Jackson—Jack and R. G. Kennington, 827 Pinehurst St., let contract to McGee & Wetmore, N. O. G. N. Station, for \$19,000, 1-story, 2-store brick building on Capitol St.; marble and terra cotta front, concrete foundation, plastered interior, cement floors, built-up composition roof; Jones, Roessle, Olschner & Weiner, Archts., Ardis Bldg., Shreveport, La. 10-6

Mo., St. Louis—North Western Corp., 6304 W. Florissant St., let contract to W. H. & Nelson Cunliff Co., 410 N. Euclid Ave., for \$40,000, 2-story, 17x50 ft., brick store and tenement building, 6200-16 W. Florissant St.; also \$10,000, 2-story, 28x47 ft., brick tenement, 5791 Floy St.; composition roof, boiler heat; Klingensmith-Wilkins, Archt., 1218 Louderman Bldg.

Mo., St. Louis—M. Zellenovitch, 6215 Barton St., has plans by and let contract to C. G. Hory, 6054 Horton Place, for \$10,000, one-story, 23x50-ft., brick store, 5610 Natural Bridge; gravel roof, hot water heat.

Mo., St. Louis—Sol Weinberg, 5911 Page St., erecting \$150,000, 3-story store and apartment building, Union Blvd. and St. Louis Ave.

N. C., Winston-Salem—John F. Smithdeal, 1183 W. Fourth St., let contract to Grey Concrete Co., Thomasville, for 2 buildings, Trade and Fifth Sts.; all material purchased.

N. C., Winston-Salem—W. N. Reynolds let contract to Burns-Hammond Constr. Co., Jefferson Bldg., Greensboro, for 2-story, 75x88 ft., 4-store and 4-office building, Fourth and Spruce Sts.; cost \$60,000, reinforced concrete, fireproof, faced with Mount Airy granite, limestone and marble; North-up & O'Brien, Archts., Starbuck Bldg. 11-10

N. C., Winston-Salem—Dr. W. H. Bruce let contract to H. R. Sims for \$41,800 store and office building, Patterson Ave. and Sixth St.; 2 stories and basement, 100x50 ft.; 6 stores, 15 offices, brick and steel, concrete foundation.

Okla., Tulsa — Following sub-contracts awarded on \$650,000 Dan Hunt Bldg. under construction by W. H. Horster, Exchange Bank Bldg.; Dan Hunt, Sr., owner; Electric, Rickard Electric Co.; elevators, Otis Elevator Co.; metal windows, Murry R. Womble Co.; wood windows, Arkia Sash & Door Co., all Tulsa; plumbing and heating, MacMahon Co.; forms, Elmer Sigler Co.; reinforcing steel, E. C. Marqua, all Kansas City, Mo.; Geo. Winkler, Archt., Tampa, Fla. 11-10

S. C., Columbia—Frigidaire Corp. and Delco-Light Co., 1617 Sumter St., E. W. Allen, Mgr., local branch, remodeling and redecorating building at 1309 Main St. for display and salesrooms.

Tenn., Knoxville—R. S. Freeman, 526 S. Central Ave., started work on \$10,000, one-story, 50x70 ft., brick store building, 1903 W. Cumberland Ave.

Tex., Houston—Lightfoot Construction Co., 3103 Main St., soon start work on \$75,000, 2-story, 76x114 ft., brick and stucco community store building, Harrisburg Blvd. and

Avenue B; house grocery store, drug store, filling station, bakery, delicatessen, meat market, fruit and vegetable stand on first floor; temple of Eastgate Masonic Lodge on second floor; hollow tile, stucco and plaster construction; Lamella roof; holding and operating company being formed and will be chartered to take over project.

Tex., San Antonio—Nevelow Bros., 301 N. Flores St., let contract to E. W. Oeffinger, Builders Exchange Bldg., for \$27,500, 1-story, 143x101 ft., concrete and tile building; Ralph H. Cameron, Archt., City Natl. Bank Bldg. 9-29

Theaters

La., Lake Charles—Southern Amusement Co. has permit for repairs and addition to Arcade Theater, cost \$13,100.

Tenn., Knoxville—Public Theaters Corp., 16 E. 42nd St., New York, let contract to Geo. A. Fuller Co., 949 Broadway, New York; C. W. Dolle, Const. Supt., and 140 S. Dearborn St., Chicago, for \$1,000,000 Tennessee Theater; C. B. Atkins considering changing office building plans from 5-story to 10-story building over theater; probably award to Knoxville contractor; Graven & Mayger, Archts., 180 N. Michigan Ave., Chicago. 10-13

Va., Norfolk—Echols Construction Co., 290 Bank St., erecting Newport Theater and store building, 35th St. and Newport Ave., for Newport Development Co.; fireproof,

brick; A. O. Ferabee, Archt., Arcade Bldg. 8-25

Warehouses

Mo., Kansas City—Beaver Products Co., Buffalo, N. Y., let contract to Geo. P. Reintjes Co., 2517 Jefferson St., for \$50,000, 90x150 ft. warehouse addition, Crystal Ave.

Tenn., Knoxville—H. A. Gervin Construction Co., Contr., let following subcontracts for remodeling building at 415-17 Gay sts. for storage purposes and salesroom: McGinn & Reiche, 411 W. Park Ave., heating; Warner Service Co., 102 W. Clinch Ave., electric work; Engert-Long Plumbing Co., 604 Asylum Ave., plumbing; Kingsville Iron Co., reinforcing steel; W. E. & V. F. Gilbert, 500 Martin Mill Pk., plastering; G. A. Tillett, 422 W. Front St., painting; plans by C. A. Tarwater include 2-story, 74x230 ft. building, brick walls, concrete floors, stone and tile partitions, Vulcan doors; cost \$45,000. 11-24

Tex., Dallas—Harold and Lucius Abrams let contract to Watson Co., 1927 S. Akard St., for \$25,000 warehouse; 2 stories, reinforced concrete, hollow tile and brick, concrete floors, composition roof; G. H. Thos. Washburn, Archt., 3109 Cornell St., Myers & Myers, Engrs., Mercantile Bank Bldg.

Tex., Galveston—Cotton Concentration Co., James Garrison, V.-P., 12th and A Sts., let contract to W. A. Kelso & Co., Inc., 2215½ C St., for 2 additional units to warehouse, Avenue H between 55th and 56th Sts.; cost \$90,000, 540x264 ft., 20 ft. high.

INDUSTRIAL NEWS OF INTEREST

Items of news about industrial, railroad or financial interests, building operations, construction work, municipal improvements, or the sale of machinery or the letting of contracts in the South or Southwest, are invited from our readers, whether they are advertisers, or subscribers, or not. We invite information of this character from readers in the North and West about their Southern business operations, as well as from Southern readers. News of value will be published just as readily when from non-advertisers as from advertisers.

Wm. Cramp & Sons Equipment to Be Sold.

A formal announcement is made elsewhere in this issue of the complete liquidation sale of the entire shipbuilding facilities of the Wm. Cramp & Sons Ship and Engine Building Company at Philadelphia, Pa., which includes, it is stated, exceptionally fine locomotive cranes, traveling cranes, hammerhead cranes and air compressors, besides many other items too numerous to mention in detail, but which comprise a great variety of machinery such as is used in a big, first-class shipbuilding plant. Drills, grinders, steam hammers, hoists, bolt machines, pipe machines, woodworking machines, rolls, punches, saws of various types, yard locomotives, etc. These are only a small part of the aggregate. Further particulars will be found in the advertisement.

Chain Belt Buys Another Business.

The Chain Belt Company of Milwaukee, Wis., has purchased the mortar and plaster mixer business of the Atlas Engineering Company, also of that city. This is the second manufacturing business which has been bought by the Chain Belt Company within a year, the Stearns Conveyor Company of Cleveland, Ohio, manufacturers of belt conveyors, having been taken over about 11 months ago. The acquisition of the Atlas business will result in a complete line of mortar and plaster mixers being added to the Rex line of concrete mixers. The Chain Belt Company has two plants at Milwaukee in addition to the plant at Cleveland. There are four other companies affiliated with it, viz., Federal Malleable Company, Siver Steel Casting Company, Interstate Drop Forge Company and Nugent Steel Casting Company.

Alonzo G. Kinyon.

Alonzo G. Kinyon, consulting engineer with the Fuller Lehigh Company of Fullerton, Pa., who died November 13 at Baltimore, Md., was widely known for his service to various industries, but the outstanding point of his life was the invention and development of the

Fuller-Kinyon Conveying System for transporting pulverized material. It is widely used in many diversified industries. In recognition of his efforts the Longstreth medal was awarded to him November 11, 1926, by the Franklin Institute, as well as life membership in that organization. Mr. Kinyon was born at Amboy, Ill., in 1870 and at an early period in his life became connected with railroad work, being identified with development of fuel-burning equipment and fuel conservation. In 1915 he joined a company interested in the use of pulverized coal on locomotives and later he organized the Kinyon Pulverized Fuel Engineering Company to work out pulverized fuel application for use in hotels and apartments. In September, 1918, he joined the Fuller Lehigh Company.

The Sorg Oil Engine, a new Power Unit.

The Sorg oil engine, according to the Sorg Engine Manufacturing Company of Sheffield, Ala., is a new type of prime mover that is free from complications. It is further stated that it can be made in small units without complicated pumps or auxiliary mechanism, and it weighs less per horsepower than some gasoline engines and it burns non-volatile oils with increased cleanliness. It is not necessary to crank this engine, as the charge is ignited by an electric spark and not by heat developed by compression. It is also stated that the machine operates equally well with furnace oil, solar oil, alcohol, kerosene or gasoline, and that no adjustments need be made to change from one fuel to another. It will operate with full load or an overload without pumping, "pinging" or knocking. The compression is stated to be 70 pounds per square inch. The weight of the five horsepower engine is 260 pounds and speed is 800 revolutions per minute.

Dry Kilns Being Remodeled.

The Alaska Lumber Company of Benton, Ark., is remodeling dry kilns by installing Universal dry-kiln equipment manufactured by the Universal Vacuum Dryer Company of Kansas City, Mo.

WANT SECTION

THE CLASSIFICATIONS IN THIS SECTION ARE:

Machinery and Supplies

Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.

Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.

Building Materials and Equipment

This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.

Bids Asked

Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.

Machinery and Supplies

Air Compressor.—Birmingham Engine and Machinery Corp., Birmingham, Ala.—Wants motor driven air compressor, 2 stage, 800 cu. ft. capacity; prefer Hardie-Tynes Mfg. Co.

Box Making Machinery.—Cumberland Box Co., F. P. Smith, Mgr., Cumberland, Md.—Wants prices on entire line machinery suitable for making wooden boxes and crates; new or used equipment.

Canning Plants, etc.—H. E. DuMetz, 2046 S. Sixteenth St., St. Petersburg, Fla.—Wants data and prices on equipment for pure food and canning plant together with refrigeration system.

Driving Hood.—W. M. Smith & Co. Mch. Dealer, Birmingham, Ala.—Wants driving hood for 12-in. piles, 17-in. between guides, 4-in. guides; used equipment preferred.

Filling and Weighing Machines.—The Georgia Gravel Co., Morris Rd., Columbus, Ga.—Wants filling and weighing machines which are ordinarily used for cement industry; correspond with manufacturers.

Gas Stoves, etc.—Hopewell Machine Shops, Box 493, Hopewell, Va.—Wants to correspond with manufacturers of gas stoves and appliances, with view to representation in Hopewell.

Grading and Packing Machinery.—J. K. Smith, Sec., DeRidder Chamber of Commerce, DeRidder, La.—Wants machinery for grading and packing satsuma oranges.

Grinding (Saw Dust) Machine.—Webster Price, Box 144, Iuka, Miss.—Wants mill for grinding saw dust, plans manufacturing dustless sweeping compound.

Hoist, etc.—Stuyvesant Compress Co., Inc., 316 Baronne St., New Orleans, La.—Wants machinery, hoist or otherwise, for topping or piling cotton.

Locomotives.—L. J. Breed Equipment Co. (Mch. Dealer), James Bldg., Chattanooga, Tenn.—Wants one 28 to 30 ton and one 40 ton locomotive, good condition.

Ornamental Concrete Mold Machines.—R. M. Wichers & Son, 1200 Fifth St., Gretna, La.—Wants machine to make concrete flower pots.

Refrigeration System.—See Canning Plant, etc.

Sealing Machines.—Eustice G. Watts, 1024 S. W. Ninth St., Miami, Fla.—Wants prices on sealing machines for plant manufacturing peanut butter, salad dressing, extracts, marmalades, etc.

Sheet Metal Forming Machine.—W. M. Smith & Co. (Mch. Dealer), Birmingham, Ala.—Wants light crimping punch press or sheet metal forming machine to form 16-gauge metal to 10 ft. 2-in. length; something similar to gutter work; second-hand machine preferred.

Shingle Cutting (Composition) Machinery.—Lamar Watson, Box 416, Greenville, Miss.—Wants data and prices on machinery for cutting composition roofing into shingles; correspond with manufacturers.

Shingle Cutting (Asphalt, Composition, etc.) Machine.—National Shingle Machine Co., Inc., 320 Karp Bldg., Coral Gables, Fla.—Wants to contract for manufacture of machines to cut shingles.

Weighing Machines.—See Filling and Weighing Machines.

(1) Sander

(2) Shaper

C. E. Tabor, Clermont, Fla., wants the above equipment for small woodworking shop.

(1) Generator—15 kw., compound interpole, not over 500 r.p.m. with rheostat
(2) Motor—50 h.p., 3 phase, 60 cycle, 220 volt, 900 r.p.m. squirrel cage or slip ring
(3) Saw—30-in. motor driven band, 3 phase, 60 cycle, 110/220 volts.

Hackley Morrison Co., Inc. (Mch. Dealer), 204 N. Jefferson St., Richmond, Va., wants the above equipment.

(1) Electric Welder

(2) Lathes—36-in.

(3) Milling Machine—modern type

(4) Piston Ring Stock.

Acme Machine Co., Inc., Pier "A", Galveston, Tex., wants prices on the above equipment.

Steel Mortar Boxes.—H. R. Emerick, Birmingham, N. Y.—Wants to purchase mortar boxes made of steel.

(1) Angles—up to 8x8x $\frac{3}{4}$ -in.

(2) Hoist—single drum for $\frac{1}{2}$ -in. wire rope, arranged for belt or gear drive

(3) Gears—steel or cast iron, cut or cast teeth, 24 to 48-in. diam., also pinions to match

(4) I-Beam Hoists—1 or 2 ton capacity, A. C. or D. C.

(5) Japanning Oven—for baking large armatures, natural gas or electric heat, about 6-ft. long, 5-ft. high and 5-ft. wide

(6) Lifting Magnet—for 220 volts, direct current

(7) Motors—A. C. and D. C., 2 h.p. up to 20 h.p.; variable speed, 600-1200 r.p.m., A. C. 220 volts, 3 phase, 60 cycle

(8) Steel sash for garage

(9) Transformers—5 kv-a to 440-220-110-volt and 2200 to 440-220-110-volt

(10) Steel Building—heavily constructed, 1 or 2-story, about 60x100-ft. for garage and shop.

Guxan Machine Shops, B. Shell, Pres., Logan, W. Va., wants above equipment and supplies.

(1) Gas Burners—all kinds

(2) Gas Logs

(3) Heater Ranges

(4) Meters

(5) Pressure Regulators.

Franklin Gas Co., 110 Washington St., Franklin, Ky., wants the above equipment and materials.

Miscellaneous

Bags or Sacks.—The Georgia Gravel Co., Morris Rd., Columbus, Ga.—Wants to purchase sacks used in shipment of special sand, 1 cu. ft. capacity; correspond with manufacturers located in South Carolina.

Clay.—Eugene Chatterton, Industrial Engr., South Carolina Power Co., 141 Meeting St., Charleston, S. C.—Wants to correspond with firms or persons producing clay in South Carolina; wants to obtain prices on various grades.

Metal Clips.—National Shingle Machine Co., Inc., 320 Karp Bldg., Coral Gables, Fla.—Wants to contract for manufacture of metal clip, special design.

(1) Bottles

(2) Corks

(3) Caps

(4) Cartons

(5) Glasses

(6) Packing Boxes

Eustace G. Watts, 1024 S. W. Ninth St., Miami, Fla., wants the above equipment for plant to manufacture extracts, peanut butter, salad dressing, etc.

Building Material and Equipment

Catherine Bryd'a, M. D., American Bldg., Ada, Okla., wants prices on following for \$10,000 to \$16,000 residence:

Cast Stone

Flooring—hardwood, linoleum, tile, composition

Incinerator

Roofing—asbestos shingle, asphalt shingle

Sprinklers

Steel Sash and Trim.

Geo. F. Hazelwood, Contr., Cumberland, Md., wants prices on following for \$90,000 office building:

Flooring—linoleum

Tile—gypsum

M. T. Morris, 314 N. Fourth St., Murray, Ky., wants prices on following for 2-story brick building:

Elevators (2)—wooden, hand run

Roofing—asphalt shingle.

Wm. Draper Brinckloe, Archt., Easton, Md., wants prices on following for remodeling and addition to building, cost \$75,000:

Cast Stone

Dumb Waiters

Flooring—tile, composition

Incinerator

Limestone

Metal Doors

Plaster Board

Roofing—built-up, slate

Sprinklers

Steel Sash and Trim

Vault Lights

Wire Glass.

A. L. Will Co., Contr., 642 N. Centre St., Cumberland, Md., wants prices on following for \$191,500 church:

Damp and Water Proofing

Roofing—built-up, slate.

Cornell G. Curtis and E. A. Thomas, Archts., 1603 Post Dispatch Bldg., Houston, Tex., want prices on following for 3 dwellings, Nacogdoches, Tex.:

Cast Stone

Flooring—hardwood, linoleum, tile

Roofing—asbestos shingle, asphalt shingle, tile.

Also wants sub-bids on

Electric Wiring

Heating—hot water

Millwork

Miscellaneous Iron

Painting

Plumbing

Steel—reinforcing.

Lucien E. D. Gaudreau, Supvg. Engr., 3458 Park Heights Ave., Baltimore, Md., wants prices on following for \$300,000 church:

Cast Stone.

Page Bros., Archts., Austin Natl. Bank Bldg., Austin, Tex., want prices on following for \$100,000 auditorium and city hall, Texas City, Tex.:

Cast Stone

Flooring—terrazzo, tile

Roofing—built-up

Steel Sash and Trim

Tile—hollow

Vaults

Ventilators.

Claude Thomason, Osceola, Ark., wants information and prices on door beds, heating plants, soundproofing material, etc., for duplexes.

N. B. Williams, 128 Church St., Martin, Tex., wants prices on following for Home Economics Building and Science Hall, University of Tennessee Jr. College:

Marble

Roofing—tile (B. Mifflin Hood tile roof about 210 squares.)

M. W. Lewis, Bldr., 1504 Lovett St., Glenwood, N. C., wants prices on following for dwellings:

Doors

Framing and Sheathing

Flooring—pine, hardwood

Roofing—asphalt shingle

Siding—pine.

Sea Island Supply & Constr. Co., Sam G. Jones, V.-P., Brunswick, Ga., wants prices on following for \$550,000 hotel at Glynn Isle:

Cast Stone

Elevators

Floors—terrazzo, tile, composition

Marble

Metal Doors

Tile—hollow, interior

Vaults.

O. F. Usher, 1202 Pennock Ave., Nashville, Tenn., wants prices on following for \$16,000 apartment building:

Electric Refrigerators

Roofing—tile

Steel Sash and Trim

Terra Cotta Trim.

Bids Asked

- Alidades.**—U. S. Coast and Geodetic Survey, Washington, D. C.—Receives bids Dec. 2 for 20 planetable alidades.
- Aluminum Pitchers.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 9 for 300 heavy gauge alumina pitchers, capacity 4 qts.
- Automobile Soap.**—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Dec. 2 for 31,850 lbs. automobile soap.
- Automobile Supplies.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 10 to furnish automobile supplies, delivery Philadelphia, Pa. Sch. 271.
- Band Saw.**—U. S. Veterans' Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 5 for 30-in. band saw complete with pedestal base.
- Batteries.**—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Dec. 7 for 100 storage batteries.
- Books (Score).**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 12 to furnish 10,900 books, score, delivery Philadelphia, Pa. Sch. 273.
- Bridge.**—State of Tennessee receives bids for 38 bridges. See Construction News—Roads, Streets, Paving.
- Bridge.**—State of South Carolina receives bids for 11 bridges. See Construction News—Roads, Streets, Paving.
- Bridge.**—State of Texas. See Construction News—Roads, Streets, Paving.
- Bridges.**—Bellville, Tex., receives bids for bridges. See Construction News—Roads, Streets, Paving.
- Bridges.**—State of Missouri receives bids for 19 bridges. See Construction News—Roads, Streets, Paving.
- Bridge Approaches.**—State of North Carolina. See Construction News—Roads, Streets, Paving.
- Celluloid, etc.**—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Dec. 10 for 200 sheets celluloid, 100 cans of automobile polish and 400 chamois skins.
- Chipboard.**—Purchasing Clerk, Bureau of Engraving and Printing, Washington, D. C.—Receives bids Dec. 2 for 20 tons of chipboard.
- Compass.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 14 to furnish 300 compass, delivery Philadelphia, Pa. Sch. 276.
- Cylinder Oil.**—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Dec. 7 for cylinder oil.
- Engineering Supplies.**—Ben M. Sawyer, Ch. Highway Commr., Columbia, S. C.—Receives bids Dec. 6 at office of State Highway Dept., for engineering supplies.
- Electric Range.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 10 for electric range.
- Excavation, etc.**—Supervising Archt., Treasury Dept., Washington, D. C.—Receives bids Dec. 8 for preliminary excavation, pipe tunnels, etc., including certain mechanical equipment work, for Administration building of Department of Agriculture, Washington.
- Feed Grinding Mill, etc.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 9 for feed grinding mill, sacking elevator and motor.
- Fire Engine.**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 7 for 750 gal. triple combination chemical engine and hose cart.
- Forage.**—Quartermaster Supply Officer, Fort Sam Houston, Tex.—Receives bids Dec. 6 for forage for various deliveries.
- Furniture.**—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Dec. 2 for 1 newspaper case and table, 15 separations, and 1 parcel post exchange case.
- Garage.**—W. H. Perkins, Chrmn. Building Committee, School Dist. No. 1, Baton Rouge, La.—Receives bids Dec. 22 to construct storage and truck garage, brick, tile roof; Wm. T. Nolan, Archt., 1048 Canal Bank Bldg., New Orleans.
- Gravel.**—State Hospital Removal, Improvement and Land Sale Coman., R. L. Brown, Sec., Box 40, Jackson, Miss.—Receives bids Dec. 7 for furnishing washed gravel and pit run gravel for construction and repair of roads and boulevards for State Insane Hospital, Whitfield; specifications on file at office Mr. Brown.
- Heating Plants.**—U. S. Engr., Louisville, Ky.—Receives bids Dec. 2 for installing and furnishing steam heating plants in power houses at dams No. 50, 52 and 53, Ohio River.
- Hose.**—U. S. Engr., Huntington, W. Va.—Receives bids Dec. 2 for 3500 ft. of water hose and 1000 ft. of pneumatic tool hose.
- Kitchen Equipment.**—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Dec. 15 for 150 pot chairs, 300 corkscrews, 300 vegetable dishes, 50 carving forks, 100 carving knives, 250 meat knives, 24 coffee mills, 150 butcher steels, 200 cake turners.
- Kitchen Equipment.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 15 to furnish kitchen equipment; delivery Philadelphia, Pa. Sch. 285.
- Lighting Fixtures.**—Charlotte County Commrs., Carl Hargraves, Chrmn., Punta Gorda, Fla.—Receives bids Dec. 7 to furnish lighting fixtures for court house; J. F. Leitner, Archt., 222 Stovall's Bldg., Tampa, Fla.
- Miscellaneous Supplies.**—Panama Canal, A. L. Flint, General Purchasing Officer, Washington, D. C.—Receives bids Dec. 13 for following; circular 1845:
- Steel cabinets, electric lighting plant, tufting machines, cotton cleaning machines, brake shoes, steel, bronze, monel metal, pig iron, wire rope, hose, blocks, joists, manila rope, fire extinguisher liquid, excelsior, etc.**
- Miscellaneous Supplies.**—Navigation Dist. Commrs., R. C. Allin, Sec., Houston, Tex.—Receives bids Dec. 15 to construct 10,000 gal. water tank; 970 ft. railroad track at Manchester; furnish 6 ground throw switch stands with cover plates; furnish battery service, blue printing, engineering supplies, gasoline, oil and grease, tire tubes, etc.; plans with Port Director Court House, Houston.
- Mops.**—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Dec. 14 for 10,000 cotton mops.
- Motor.**—U. S. Engr., St. Louis, Mo.—Receives bids Dec. 14 for one 940 h. p., d. c. motor.
- Oakite and Polish.**—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Dec. 9 for 8000 pkgs. of oakite, 5000 cans metal polish, and 4000 cakes stove polish.
- Oil Burners.**—Dir. of Purchase and Sales, Dept. of Agriculture, Washington, D. C.—Receives bids Dec. 2 for 6 oil burning heaters.
- Padlocks.**—Marine Corps, Quartermaster's Dept., Washington, D. C.—Receives bids Dec. 13 to furnish 4500 padlocks, delivery Philadelphia, Pa. Sch. 264.
- Painting.**—Quartermaster of Army War College, Washington, D. C.—Receives bids Dec. 2 for painting building, garages, etc.
- Paints.**—U. S. Engr., Huntington, W. Va.—Receives bids Dec. 2 for 6000 lbs. white lead, 700 gals. asphalt varnish, 100 gals. green paint, 40 gals. interior varnish, 25 gals. of outside paint and 60 gals. interior paint.
- Paints.**—Depot Quartermaster, Marine Corps, Philadelphia, Pa.—Receives bids Dec. 8 for 600 gals. of orange shellac, 1200 gals. of white shellac, 500 gals. of petroleum spirits, 300 gals. of interior varnish and 300 gals. spar varnish.
- Paper, etc.**—U. S. Engr., Huntington, W. Va.—Receives bids Dec. 2 for 85 lbs. of wrapping paper, 25 lbs. of twine and 12 cases toilet paper.
- Paving.**—Ada, Okla. See Construction News—Roads, Streets, Paving.
- Pipe.**—U. S. Engr., Jackson, Miss.—Receives bids Dec. 2 for 1500 ft. of 20-in. inside diam. riveted steel shore discharge pipe.
- Pipe Tunnels, etc.**—Treasury Dept., Supvg. Architect's Office, Washington, D. C.—Receives bids Dec. 8 for preliminary excavations, pipe tunnels, etc., including certain mechanical equipment work for administration building, Dept. of Agriculture, Washington, D. C.
- Rags.**—Pur. Agt., P. O. Dept., Washington, D. C.—Receives bids Dec. 7 for 525 5-lb. bolts of rage, 150 50-lb. bales of rags, and 125 250-lb. bales of rags.
- Railroad Ties.**—Quartermaster, Fort Eustis, Va.—Receives bids Dec. 2 for 3000 railroad ties.
- Road.**—Bellville, Tex. See Construction News—Roads, Streets, Paving.
- Roads.**—State of Missouri receives bids for 24 roads. See Construction News—Roads, Streets, Paving.
- Road.**—Sarasota, Fla., receives bids for 5 roads. See Construction News—Roads, Streets, Paving.
- Road.**—State of Tennessee receives bids for 17 roads. See Construction News—Roads, Streets, Paving.
- Road.**—Tampa, Fla. See Construction News—Roads, Streets, Paving.
- Road.**—Cuero, Tex. See Construction News—Roads, Streets, Paving.
- Road.**—State of South Carolina receives bids for 13 roads. See Construction News—Roads, Streets, Paving.
- Road.**—State of Kentucky. See Construction News—Roads, Streets, Paving.
- Roads.**—State of North Carolina receives bids for 15 roads. See Construction News—Roads, Streets, Paving.
- Roads.**—State of Texas receives bids for 6 roads. See Construction News—Roads, Streets, Paving.
- Road Machinery.**—J. G. Sherrard, Warren County Clerk, Vicksburg, Miss.—Receives bids Dec. 6 to furnish 5-ton tractor and one road maintainer.
- Road Protection, etc.**—Pascagoula, Miss. See Construction News—Roads, Streets, Paving.
- Sewers.**—Board of Commrs. of Tangipahoa Drainage Dist. No. 1, J. M. Blache, Pres., Hammond, La.—Receives bids Dec. 19 for construction of outfall sewer extension from disposal plant to ditch No. 3, involving earth excavation, laying of concrete and cast iron pipes, erecting wooden supports, etc.; E. G. Freiler, Engr.
- Sewers.**—E. E. McAdams, City Mgr., Waco, Tex.—Receives bids Dec. 6 for 2500 lin. ft. of sewer, cuts varying from 0 to 14 ft.; 600 lin. ft. of 10-in. sewer, cuts varying from 12 to 16 ft.; 100 6x6-in. wyres; 3x10-in. wyres; 2 manholes, 24 ft. additional feet of manholes; and vitrified salt-glazed sewer tile; J. H. Strange, City Engr.
- Sewer.**—City Clerk, Jefferson City, Mo.—Receives bids Dec. 7 for 1000 cu. yds. of rock excavation, 12 manholes, 1113 ft. of 8-in. pipe, 1635 ft. of 6-in. pipe; 2398 ft. 0 to 6 ft. ditch and back filling; 150 ft. 6 to 8 ft. ditch and back filling; 200 ft. of 8 to 10 ft. ditch and back filling; and 70 sq. ft. of pavement repaving; F. E. Ross, City Engr.
- Sewer Inlets, etc.**—Board of Awards, Baltimore, Md.—Receives bids Dec. 7 for furnishing and delivering manhole frames and covers, sewer inlet and similar iron castings to Bureau of Sewers; Milton J. Kuark, Sewerage Engr.
- Sharpening Machine.**—Dir. of Purchase and Sales, Dept. of Agriculture, Washington, D. C.—Receives bids Dec. 2 for 1 machine for sharpening microtome knives.
- Sidewalk, etc.**—Selma, Ala. See Construction News—Roads, Streets, Paving.
- Signal Lights, etc.**—Purchasing Agt., District Government, Washington, D. C.—Receives bids Dec. 2 for 4 single face 1-way aluminum body traffic light signals, one 110-volt, 60 cycle, a. c. automatic time and 8 wrought iron pale clamps for traffic office.
- Steel Tug.**—U. S. Engr., Galveston, Tex.—Receives bids Dec. 17 for construction of one 85-ft. steel tug.
- Steel.**—U. S. Engr., Huntington, W. Va.—Receives bids Dec. 2 for 26,700 lbs. manganese alloy steel plates and 23,900 lbs. structural steel channels.
- Sterilizer (Instrument).**—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 10 for electric instrument sterilizer.
- Street.**—San Antonio, Tex. See Construction News—Roads, Streets, Paving.
- Street.**—Baltimore, Md. See Construction News—Roads, Streets, Paving.
- Tank.**—Commanding Officer, San Antonio Arsenal, Tex.—Receives bids Dec. 19 for 1 standard underground gasoline tank.
- Tobacco Products.**—Quartermaster Supply Officer, Fort Sam Houston, Tex.—Receives bids Dec. 7 for cigars, cigarettes, tobacco.
- Towers.**—Division of Supplies, Dept. of Commerce, Washington, D. C.—Receives bids Dec. 5 for 50 towers, 20 ft., and tank house combined.
- Tractor.**—Road and Bridge Committee, F. A. Wood, Sec., Baton Rouge, La.—Receives bids Dec. 21 for 2 ton crawler type tractor.
- Trailer.**—Board of Awards, Baltimore, Md., Edward G. Rost, Water Engr.—Receives bids Dec. 7 for furnishing and delivering one 4 wheel 800 gal. tank trailer to Bureau of Water Supply.
- Trucks.**—Dist. Commrs., Washington, D. C.—Receives bids Dec. 2 for two 2-ton trucks for use in trees and parking department.
- Tug.**—U. S. Engineer Office, Galveston,

Tex.—Receives bids Dec. 17 to construct 65-ft. steel tug.

Valves Shafts.—U. S. Engr., Huntington, W. Va.—Receives bids Dec. 3 for 5600 lbs. valve shafts of cold rolled round steel shafting.

Water Piping, etc.—Supervising Archt., Treasury Dept., Washington, D. C.—Receives bids Dec. 14 for removing present water supply piping, etc., and furnishing and installing new brass water supply piping, etc., in U. S. post office and court house, Athens, Ga.

Water Works.—Alexandria Water Co., Alexandria, Va., Urban S. Lambert, Pres.—Receives bids Dec. 12 for pumping machinery and additions to pumping station; Hazen and Whipple, C. E., 25 W. 43rd St., New York; machinery includes the following:

(1) **Boiler**—steam

(2) **Heaters, etc.**—crane and appurtenances
(3) **Pump**—water power driven, steam turbine driven with condenser; feed water.

Water Works.—Trustees of Beaver Dam Water and Sewer Dist., R. E. Holcombe, Chrmn., Asheville, N. C.—Receives bids Dec. 5 for furnishing all labor, tools, machinery, equipment, materials, etc., for construction of water distribution system in Beaver Dam Water and Sewer Dist.; approximate quantities of work are as follows:

Section 1—36,450 ft. of 6-in., 14,800 ft. of 12-in. cast iron pipe; 10,000 ft. of 2-in. galvanized wrought iron pipe; 40 hydrants, 78 gate valves.

Section 2—One 500,000 gal. reinforced concrete reservoir; 1 pumping station; 10,000 ft. of 8-in. cast iron pipe, and 6000 ft. of 6-in. cast iron pipe; Howerton Engineering Co., Engrs., 410 Medical Bldg.

Whiteway Lighting System—City of St. Joseph, Mo., Geo. W. Akers, Pres., Board of Public Works.—Receives bids Dec. 5 for white way street lighting system, including 152 whiteway standards; bids received separately on materials and labor.

X-Ray Chemicals.—U. S. Veterans Bureau, Supply Div., Washington, D. C.—Receives bids Dec. 10 for x-ray chemicals.

Water Works.—DeKalb, Miss., W. D. Hooper, Mayor, and E. H. Jones, Clerk of Board—Wants prices on the following for water works: Henry A. Mentz, Engr.:

(1) **Fire Plug**

(2) **Hose**

(3) **Iron**

(4) **Pipe**—6 and 4-in. cast iron water main; and 2-in. galvanized water pipe.

(5) **Water Tank**—25,000 to 74,000 gallons.

COMPLETION OF WASHINGTON TO NORTH CAROLINA STATE LINE HIGHWAY.

Virginia Highway Cost Over \$7,000,000 and Is 40 Miles Shorter Than Old Route.

South Hill, Va.—Unlocking of a double wooden gate on the Virginia-North Carolina boundary, 14 miles south of here, last Saturday by the Governors of the two States symbolized the opening of Highway No. 1, one of the heaviest traveled roads of the nation, traversing the Eastern States for over 2380 miles from Fort Kent, Maine, to Miami, Fla. The ceremonies were in commemoration of the completion of Virginia's last link of the highway. Governor Angus W. McLean of North Carolina, Governor Harry F. Byrd of Virginia, Henry G. Shirley, Virginia State Highway Commissioner, and Frank Page, chairman of the North Carolina Highway Commission, participated in the celebration. Mayor Y. M. Hodges of South Hill delivered the address of welcome.

The Washington-Richmond-North Carolina Highway cost more than \$7,240,000 and clips 40 miles from the distance by the old route from Washington to the North Carolina State line, according to Mr. Shirley, the distance being 204 miles over the new highway.

Virginia will have available approximately \$32,100,000 from all sources during the next two years for the building of highways on the pay-as-you-go plan, said Governor Byrd at the road opening exercises. "There are many opportunities in Virginia," said Governor Byrd, "but I believe the greatest single one is the encouragement of industrial development. Within the last few months three industries representing an investment of \$120,000,000, or the assessed value of 40 Virginia counties, have decided to locate within the State. I intend during the balance of my term to give industrial development my chief consideration."

Discussing impressions of a recent trip to North Carolina as the guest of Governor McLean, the Governor of Virginia said: "Nothing impressed me more than the spirit of progress and optimism that prevails throughout the State. I want to say to you Virginians, if you do not want to lag behind, you must show the same spirit and let 'progress' be our battle cry from now on." The Governor reiterated his program to provide for a tax reduction of \$1,000,000 for the encouragement of new industries and to get new desirable residents because "they are the best opportunities we have."

Governor McLean, in calling attention to the benefits derived from the construction of roads in North Carolina, pointed to the strides in education. "I can say without fear of successful contradiction," he said, "that nothing is more important than roads in the advancement of education. Twenty-eight years ago North Carolina was spending \$1,000,000 on her schools; now she is spending \$33,000,000 annually. Roads have annihilated space and have abolished isolation." The building of roads through agricultural sections has served to keep farmers satisfied with rural life and has stimulated interest in the growing of products of the soil, he declared.

\$2,000,000 PLANT AT FORT WORTH FOR MONTGOMERY WARD.

Unit to Provide 500,000 Square Feet of Floor Space Proposed—Plans Ready Soon and Work to Start Promptly.

Fort Worth, Texas.—Montgomery Ward & Co., Chicago, has acquired a 15-acre tract near its present plant and will construct an eight-story, U-shaped building, 360 by 220 feet, estimated to involve the expenditure of \$2,000,000. It will provide more than 500,000 square feet of floor space, or more than double the space now occupied. It is believed that work will start not later than January 15, and that the plant will be finished with 12 months. The present force of 850 employees will probably be increased to between 1500 and 2000 when the new unit is finished.

The structure will be of reinforced concrete construction with steel sash, and sprinkler equipped throughout. Plans are now being prepared by the company's construction department and should be finished about December 1.

Big Addition for Cigarette Plant at Reidsville.

Reidsville, N. C.—The Fiske-Carter Construction Company, Greenville, S. C., was recently awarded the general contract for the construction of the new cigarette factory for the American Tobacco Company here. The new building will be 82 by 252 feet, two stories and a basement. The foundations and the steel frame are designed to carry five additional stories, making a seven-story unit when completed. It is also designed to facilitate the erection of a duplicate unit. The construction is of steel frame with brick curtain walls. J. E. Sirrine & Co., Greenville, are the engineers.

\$1,400,000 Apartment House for Baltimore.

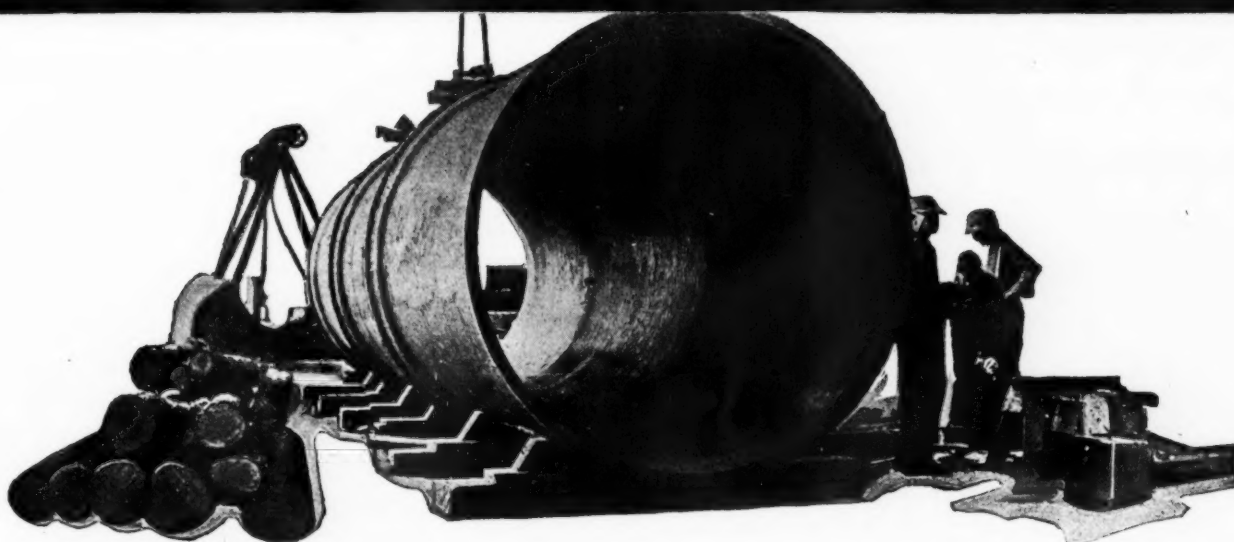
Work will begin shortly on the \$1,400,000 Warrington Apartments to be erected in the 3900 block North Charles street, Baltimore, by the Gillet Realty Company. Wyatt & Nolting are the architects and the Consolidated Engineering Company the general contractor. The 12-story building will be fireproof, of brick and Indiana limestone, containing 50 suites, which will be finished in the rough, so that they can be completed to suit the individual taste of the tenant. There will be two guest elevators and two for service.

\$4,000,000 Road Bonds in Hidalgo County, Texas, Win Out.

Edinburg, Texas.—The \$4,000,000 bond issue for the construction of improved roads and bridges in Road District No. 1 of Hidalgo county carried by an overwhelming majority.

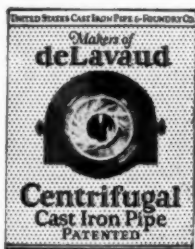


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FINANCIAL NEWS

Bond Issues Proposed

Ala., Mobile—Seaport—State Docks Commission, Gen. William L. Sibert, Chmn., Birmingham, plans receiving bids Dec. 15 for \$2,000,000 State seaport bonds. 11-3

Ala., Tuscaloosa—Water Works—City, M. K. Kersh, Clk., votes Jan. 16 on \$350,000 bonds to change water supply from Warrior River to Yellow Creek; W. H. Nichol, City Engr. 11-10

Fla., Bartow—Highway—Polk County plans voting on \$50,000 bonds. Address County Commrs. 11-10

Fla., De Land—Road, Bridge—Volusia Co. Commrs., Sam D. Jordan, Clk., receive bids Dec. 8 for \$30,000 6% De Leon Springs-Glenwood Special Road and Bridge coupon bonds. 11-3

Fla., Gainesville—School—High Springs School Dist., Alachua County, voted \$38,000 bonds. Address Board of Public Instruction. 11-3

Fla., Homosassa—School—City voted \$36,000 bonds; plans selling bonds. Address City Clk. 11-3

Fla., Ocala—Highway—Marion County Commrs., T. D. Lancaster, Jr., Clk., receives bids Jan. 4 for \$1,000,000, \$1,000 denom. not to exceed 6% bonds. 11-3

Fla., Sarasota—School—Sarasota County, Special Tax School Dist. No. 10, Englewood, votes Dec. 20 for \$38,000 6% bonds; T. W. Yarbrough, Supt., Board of Public Instruction. 11-3

Fla., Venice—Street—City, H. E. Haynie, Clk., plans \$300,000 6% \$1000 denom. bond issue; John Burkett, City Atty; E. L. Worthington, Mayor. 11-3

Ga., Commerce—Street—City, N. B. Lord, Clk., and Treas., receives bids Dec. 12 for \$31,000, 5%, \$1,000 denom. bonds. 11-3

Ga., Palmetto—Water Works—City votes Dec. 7 on \$34,000. Address City Clk. 11-3

Ky., Catlettsburg—Bridge—City, James Barbee, Clk., receives bids Dec. 19 for \$20,000, not to exceed 5% bonds. 11-3

Ky., Louisville—Bridge—City, J. J. Kunz, City Comptroller, defeated \$5,000,000 bond issue. 10-20

Ky., Louisville—City, Joseph T. O'Neal, Mayor, reported, voted \$1,500,000 bonds, for park improvements, boulevards and parkways. 9-22

La., Alexandria—Bridge—Rapides Parish Police Jury plans \$100,000 bond issue. 11-3

La., Cameron—Road—Cameron Parish Police Jury, J. W. Doxey, Clk., receives bids Jan. 2 for \$105,000 6%, \$500 denom. Consolidated Road Dist. "A" bonds. 11-3

La., Covington—Road—St. Tammany Parish Police Jury, J. B. Howze, Pres., receives bids Dec. 13 for \$40,000 6% Road Dist. No. 4 bonds. 11-3

La., Pineville—Town, C. G. David, Clk., receives bids Dec. 14 for \$137,000 6% bonds; \$100,000, sewer; \$37,000, water works. 11-3

La., Ville Platte—Road—Evangeline Parish Police Jury receives bids Dec. 12 for \$18,000, 6% bonds. 11-3

Md., Federalburg—Water Works—Town Commrs., Thomas H. Chambers, Pres., receive bids Dec. 5 for \$30,000 4½%, \$1000 denomination bonds. 11-3

Miss., Carthage—Courthouse—Leake County Board of Supvs. plans issuing and selling \$60,000 to \$80,000, not to exceed 6% bonds. 11-3

Miss., Crystal Springs—School—Town, R. S. Brent, Mayor, has issued \$225,000 bonds. 11-3

Miss., Gulfport—Fire Truck, Fire Station—City Commrs. receive bids Dec. 15 for \$18,000, not to exceed 5½% bonds. 11-3

Miss., Pittsboro—School—Calhoun County, Chapel Hill Consolidated School Dist., votes Dec. 2 on \$14,500 bonds. 11-3

Miss., Waynesboro—Road—Waynesboro-Frost Bridge Separate Road Dist. votes Dec. 9 on \$75,000 bonds. Address Wayne County Commrs. 11-3

Mo., Bolivar—Water Works—City plans voting after first of year on \$40,000 bonds. Address City Clk. 11-3

Mo., Cabool—Water Works—City voted \$40,000 bonds. Address City Clk. 10-27

Mo., Jefferson City—City, C. B. Steer, Clk., considering bond election in April for additional playgrounds, and athletic field. 11-3

Mo., Novinger—School—Board of Education, O. M. Blackorby, Sec., plans selling \$35,000 bonds in near future. 11-10

Mo., Springfield—School—Board of Edu-

cation will call election before Jan. 31 on \$800,000 to \$1,250,000 bonds; G. G. Lydy, Pres. 11-17

N. C., Greensboro—Guilford County Commrs. receive bids Dec. 13 for \$1,565,000 bonds: \$500,000, school; \$315,000, road and bridge building; \$750,000, funding outstanding road and bridge obligations. 11-17

N. C., Salisbury—Revenue Anticipation—Rowan County Commrs., Max L. Barker, Clk., receive bids Dec. 5 for \$110,000 notes. 11-17

N. C., Star—Water Works—Town, B. B. Hogan, Clk., receives bids Dec. 15 for \$12,000, 6%, \$500 denom. bonds. 11-17

N. C., Greensboro—School—Board of Education, T. A. Glascock, Sec., receives bids Dec. 13 for \$1,000,000, 4½% or 4¾%, \$1,000 denom. Greater Greensboro School Dist. bonds. 11-17

Okla., Bristow—City receives bids Dec. 5 for \$100,800 bonds for white way, park, and water works and sewer extension; C. L. Weatherford, Engr.; Malcolm Morrison, Mayor. 11-17

Okla., Cement—Sewer—City voted \$30,000 bonds; C. Riggins, Engr., Anadarko. 11-17

Okla., Perry—School—Gymnasium—City plans voting Dec. 6 on \$47,000 bonds. Address City Clk. 11-17

Okla., Ponca City—Underpass—City, H. C. Mulroy, Mayor, votes Dec. 13 on \$65,000 bonds. 11-17

S. C., Orangeburg—Highway—Orangeburg County Commrs., H. E. Moore, Clk., receive bids Dec. 6 for \$282,000, 4¾%, \$1,000 denom. bonds. 11-17

S. C., Saluda—Town, O. C. Gunter, Clk., Treas., receives bids Dec. 9 for \$175,000, \$1,000 denom. bonds; \$100,000, water works; \$75,000 sewer. 11-17

Tenn., Murfreesboro—Sewer—City voted bonds. Address City Clk. 11-17

Tenn., Somerville—Road—Fayette County may vote Feb. 4 on \$400,000 bonds. Address County Commrs. 11-17

Tenn., Austin—Hospital—City, S. W. Mabry, Director of Finance, plans receiving bids for \$100,000 bonds. 11-17

Tenn., Beville—Road—Bee County defeated \$500,000 bond issue. Address County Commissioners. 11-20

Tenn., Carrizo Springs—Water Works, Sewer—City voted \$88,000 bonds. Address City Clk. 11-20

Tenn., Cooper—Hospital—Delta County votes Dec. 31 on \$50,000 bonds. 11-20

Tenn., Dallas—Roads—Dallas County, F. H. Alexander, Judge, considering \$1,345,240 bond issue. 11-20

Tenn., Eagle Pass—Irrigation—Maverick County plans creating irrigation district, and issuing \$4,750,000 bonds; W. L. Rockwell, Engr., and Judge Ben V. King, Atty. for proposed dist. may vote Dec. 23 on bonds. 11-20

Tenn., Goliad—Road—Goliad County voted \$460,000 bonds; J. A. White, Judge. 10-13

Tenn., Graham—Water Works—City votes Dec. 6 on bonds. Address City Clk. 11-20

Tenn., Greenville—Municipal Improvement—City votes Dec. 21 on \$200,000 bonds; \$100,000, to purchase land for municipal park and erect improvements thereon; \$100,000, for municipal auditorium; Paul G. Thompson, Mayor. 11-20

Tenn., Houston—Water Works—City, James H. B. House, Water Commr. considering \$1,000,000 bond issue. 11-20

Tenn., Lindale—Water Works—City defeated \$55,000 bond issue. Address City Clk. 11-10

Tenn., Pecos—Hospital—Reeves County votes Dec. 10 on \$40,000 bonds. Address County Commissioners. 11-10

Tenn., Pittsburg—Courthouse—Camp County contemplating \$75,000 bond issue. Address County Clk. 11-10

Tenn., Sherman—School—City, Will Lester, Mayor, plans receiving bids early in Jan. for \$130,000 bonds. 10-6

Tenn., Throckmorton—Road—Throckmorton County voted \$650,000 bonds; J. L. Robinson, Judge. 11-3

Tenn., Tilden—Road, Bridge—McMullen County voted \$85,000 bonds. Address County Commrs. 11-3

Tenn., Victoria—Road—Victoria County voted \$1,092,000 bonds; P. P. Putney, County Judge. 10-13

W. Va., Morgantown—Road—Morgantown County, Union Road Dist., votes Dec. 13 on \$266,000 bonds. Address County Commrs. 11-3

Bond Issues Sold

Ark., Conway—Paving—City Commrs. sold 5½% Street Improvement Dist. No. 11 bonds to W. B. Worthen Co., Little Rock, at 103¼. 11-17

Ark., Marked Tree—Street—City sold \$25,000 bonds to J. N. Thomas and A. L. Dorsey, representing A. K. Tigrett & Co., Memphis, Tenn., at premium of 5½%. 11-17

Ark., North Little Rock, Ind. Branch, Little Rock—Vladimir—M. W. Elkins, Little Rock, purchased \$85,000, 4¾% bonds at 98.90. 11-17

Fla., Gainesville—Paving—City sold \$56,000 6% bonds to Brown, Crummer Co., Orlando, and Wichita, Kansas, at \$650 premium. 11-17

Fla., Lake Butler—Road—Union County Board of Bond Trustees, J. S. Howard, Chmn., sold \$350,000 6%, \$1000 denom. bonds to C. A. Steel, West Palm Beach, at 95.01 flat. 11-17

Fla., Moore Haven—Courthouse and Equipment—Glades County Commrs. sold \$50,000 6%, \$1000 denom. bonds to Hanchett Bond Co., Chicago, Ill. 11-17

Fla., Tampa—Road, Bridge—Hillsborough County Commrs. Court, W. A. Dickenson, Clk., sold \$300,000, 6% Lake Fern Special Road and Bridge Dist. bonds to Cone Brothers, at 96. 11-17

Md., Cumberland—Memorial Hospital—City, M. R. Hast, Clk., sold \$150,000, 4½%, \$1,000 denom. bonds to Harris, Forbes Co., New York, at 107.629. 11-24

Mo., Springfield—School—Board of Education sold 4% bonds to Kauffman, Smith & Co., St. Louis, and associates, at 98.40. 11-24

N. C., Burgaw—Pender County Commrs., Geo. F. Lucas, sold \$250,000, 4¾% road and bridge bonds to Otis & Co., Cleveland, and Title Guarantee & Trust Co., Cincinnati, Ohio, at \$235.325. 11-10

N. C., Concord—Cabarrus County Commrs. sold to Harris Forbes & Co., New York, and Wachovia Bank & Trust Co., Winston-Salem, N. C., \$170,000 school bonds at \$174.494, and \$10,000 funding at \$10.225. 11-10

N. C., Greensboro—Anticipation Notes—Guilford County sold \$500,000 short term notes to Commercial National Bank, High Point, at interest rate of 3.90%. 11-10

N. C., Taylorsville—Funding—Alexander County Commrs. sold \$34,000 5%, \$1000 bonds to Hanchett Bond Co., Chicago, Ill. 11-10

Okla., Earlsboro—Paving—City sold \$35,000 6% \$1000 denom. bonds to Hanchett Bond Co., Chicago, Ill. 11-17

Okla., Mangum—Municipal Improvement—City, Mrs. W. C. Roberts, Clk., sold to Liberty National Bank, Oklahoma City, \$75,000, 4½% water works bonds, and \$47,000, 4¾% sewer bonds, at par, accrued interest and \$25 premium. 11-17

Okla., Tulsa—City, Herman E. Newblock, Mayor, sold \$690,000, \$500 denom. 4½% bonds: \$550,000 sewer to Producers' Natl. Bank at par, premium of \$14,991, and accrued interest: \$75,000 Midland Valley underpass, Exchange Trust Co., at par, premium of \$1315 and accrued interest; \$60,000 driveway to West Tulsa Bridge, Exchange Trust Co., at par, premium of \$1067 and accrued interest. 11-17

S. C., Camden—Street—City sold \$35,000, 5% bonds to South Carolina National Bank, Columbia, at premium of \$1355, equal to 103.87. 11-17

S. C., Greenwood—City, Robt. J. Cartledge, Clk., sold to Walter, Woody & Heimerding, Cincinnati, Ohio, \$40,000 refunding, and \$50,000 water and light refunding 5% bonds at premium of \$1.800. 11-17

Tenn., Crossville—Water Works, Sewer—Town, F. H. Washburn, Recorder, sold \$100,000 bonds to Little, Wooten & Co., Jackson, Tenn., at par, accrued interest and premium of \$400. 11-3

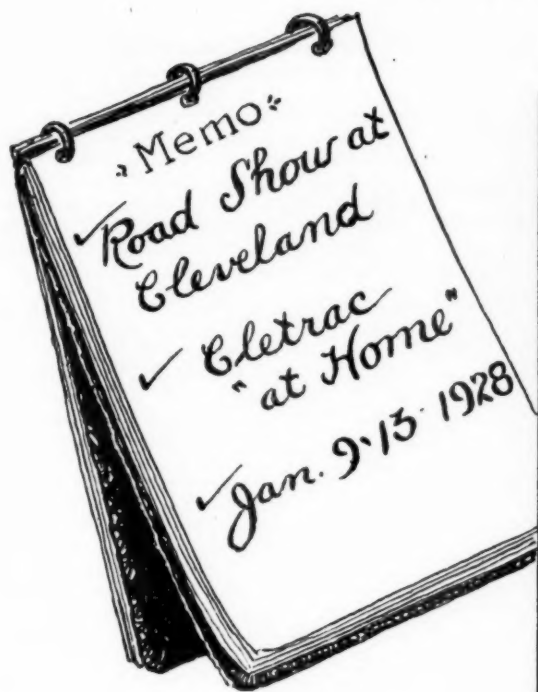
Tenn., Martin—School Site—Caldwell & Co., Nashville, Tenn., purchased \$100,000 5½% bonds. 11-3

Tenn., Nashville—Highway—State, reported, sold \$1,000,000, 3¾% short-term loans to National Park Bank, New York; Albert Williams, Commr. of Finance and Taxation. 11-3

Tenn., Austin—School—Board of Education purchased \$120,000, 5% bonds at par, accrued interest and premium of \$4,400. 11-3

Tenn., Clifton—Sewer—City, Ed. Handley, Mayor, sold \$59,000, 5% bonds to Farmers State Bank of Clifton, at premium of \$11, equal to 100.02. 11-3

(Continued on page 118)



When You Visit the Road Show at Cleveland January 9-13

COME to Cleveland expecting to find the best and biggest Road Show you've ever attended.

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And come with full expectations of a special treat from the makers of CLETRAC CRAWLER TRACTORS. Again we say, you'll not be disappointed. Cleveland is the home of CLETRAC. We promise you a royal welcome. Full details at the CLETRAC Booth at the Road Show — and in the Road Show issue of this publication.

**THE CLEVELAND TRACTOR CO.
CLEVELAND, OHIO**



FINANCIAL NEWS

(Continued from page 116)

Tex., Lasara—School—Board of Education purchased \$25,000, 5% Lasara Independent School Dist. bonds, at par and accrued interest.

Va., Danville—Bridge—City, C. B. Strange, Auditor and Clk., sold \$250,000 4½% Main Street Bridge bonds to Frederick E. Nolting & Co., Richmond, Va., and Harris, Forbes & Co., New York, at \$254,651. 11-17

Building and Loan Associations

Md., Crisfield—Home Building & Loan Assn. of Crisfield, Md., Inc., 215 Broadway, capital \$520,000, incorporated; James B. and A. Wellington Tawes, Gordon E. Milbourne.

New Financial Corporations

Fla., Jacksonville—City Loan & Finance Co., capital \$100,000, chartered; R. A. Yockey, 1646 Laura St. J. C. Merrill, Charles R. Rudisill, 339 Ring St. 11-17

Fla., Sanford—Sanford Atlantic National Bank, capital \$100,000, organized; Linton E. Allen, Pres.

La., Bastrop—Citizens State Bank & Trust Co., Washington and Madison St., capital \$75,000, opened; E. B. Folse, Pres.; A. T. Turpin, V.-P.; Hugo Spier, Cashier.

Md., Baltimore—Financial Service Corp., Chamber of Commerce Bldg., incorporated; Howard W. Jackson, George W. Rife, 24 Fallsway, Harry L. Riall.

Mo., Jefferson City—Exchange National Bank of Jefferson City, capital \$100,000, chartered; W. A. Dallmeyer, Pres.; O. W. Raithel, Cashier; conversion of Exchange Bank of Jefferson City.

Tex., Dobbins—Plantersville Bank, reorganized; G. A. Lipscomb, Pres.

Tex., Fort Worth—Construction Finance

Corp., capital \$25,000, incorporated; I. N. McCrary, 2524 Willing St., A. J. Beaver, 2209 Mielito St., John Thomason.

Tex., Houston—Marine Bank & Trust Co., D. W. Cooley, Pres., 704 Scanlon Bldg., Houston, Tex., plans increasing capital, \$300,000 to \$400,000.

Tex., Marshall—Hartt Investment Co., capital \$25,000, incorporated; W. C. Hartt, A. M. Justice.

Blossom National Bank, F. G. Johnson, Pres., George Johnson, Cashier, and Farmers' National Bank, W. J. Chalter, Pres., G. H. Montgomery, Cashier, all Blossom, Tex., consolidated, with F. G. Johnson, Pres.; T. B. Bryan, V.-P.; George Johnson, Cashier.

Trade Literature

American Gasoline Crane Booklet.

A new booklet from the American Hoist and Derrick Company of St. Paul, Minn., tells of the final building of a gasoline crane, with steam crane flexibility, saying: "In the American three-speed crane we offer a gasoline-operated crane that has the range and flexible operation of steam." The booklet has interesting views of the machine and covers thoroughly many of the construction features, one page being devoted to frictions, with further mention of revolving mechanism, gib ring instead of king pin, revolving deck, car body and trucks and universal joint transmission. A copy of this booklet can be had by writing to the company.

Dickerman Folder on Ideal Hoists.

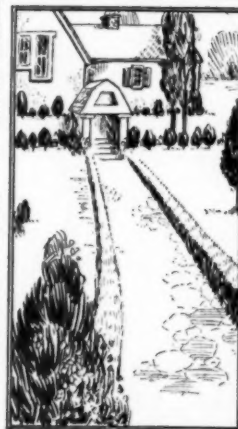
A finely printed and illustrated folder published by the Dickerman Hoist Manufacturing Company, Cleveland, Ohio, gives full information, with detailed pictures and tabulated data, concerning the "Ideal" spur-gear, ball-bearing chain hoists manufactured by the company. It is stated that they are distinguished by speed, durability, ease of operation, strength, safety, compactness, interchangeability and economy.

The Elements of Crime. By Boris Brasol.

New York: The Oxford University Press. 1927. Cloth. Pp. 380. \$5.

This is a book, to quote the author, on "the nature of crime and * * * the intricate psycho-social mechanism which is responsible for the organization of a phenomenon menacing the welfare and safety of both individual citizens and society as a whole." It will have served its purpose, he says, if it aids in the understanding of the subject. It does not aim to be an all-embracing study. "It may seem a paradox," says Mr. Brasol in his preface, "and yet it is true that no other line of human endeavor is progressing as rapidly as criminality. The modern criminal, especially of the habitual class, is fully equipped with all the latest devices of technique and, consequently, criminal activities have assumed a highly proficient and, at times, strictly scientific character. * * * It is to be regretted that the methods of investigating crimes have not kept pace with the methods of performing them."

WE ARE GLAD TO ANNOUNCE
THAT WE HAVE DISPOSED OF OUR INTEREST IN THE
AMERICAN BANK STATIONERY COMPANY
AND HAVE ORGANIZED
THE OSCAR T. SMITH & SON CO.
WE WILL OCCUPY OUR BUILDING AT
407-9-11 E. SARATOGA STREET
BALTIMORE, MD.
WHERE WE HAVE INSTALLED A COMPLETE EQUIPMENT FOR
LITHOGRAPHING-STEEL PLATING
PRINTING AND BINDERY WORK
OUR EFFORTS WILL BE DEVOTED EXCLUSIVELY TO
MANUFACTURING THE HIGHER GRADES OF
BANK AND COMMERCIAL STATIONERY



Effective Planting the Work of Specialists

This company renders skilled service based on thorough knowledge of planting. We guarantee, in the failure of any plants to live within twelve months, to furnish new plants for replacement. Our nurseries cover 75 acres containing hundreds of thousands of beautiful, flourishing and growing plants. A large organization of salesmen and landscape gardeners at your service.

The Howard-Hickory Co.
Nurserymen—Landscape Gardeners
Hickory North Carolina

Notice of Proposal to Sell Valuable Municipal Electric Light Plant.

The City Council of the City of Kinston, North Carolina, will receive offers for its valuable municipal electric light plant, together with franchise to do business in the City of Kinston, at a meeting to be held in the City of Kinston at City Hall at 7.30 P. M. on Monday, December 12, 1927.

Prospective purchasers are invited to submit seal bids for plant, franchises, rates for power and lighting to consumers, including street lighting for the City of Kinston.

The City of Kinston will require from each bidder a certified check, drawn to order of City of Kinston, upon some Bank or Trust Company in the amount of \$100,000 as evidence of good faith.

The City Council of the City of Kinston reserves the right to reject any and all bids made.

For further particulars, address the undersigned.

W. A. MITCHELL, Mayor.
W. B. COLEMAN, City Clerk.

FOR SALE

Plant C, Formerly of the American Manganese Steel Company

17 acres of land, adjoining Penn Seaboard Steel Co., 500 feet fronting along Delaware river. Main building 62x624 feet. Four steel converters, three cupolas, three electric cranes. Complete power plant. Terms to suit purchaser who will operate any line of business.

Apply to S. S. Deemer, Owner New Castle, Del. Bell Phone 5

Inspirational

Walter A. Richards, City Manager, City of Daytona Beach, Florida, writes in reference to the 1927 BLUE BOOK OF SOUTHERN PROGRESS:

"It is inspirational in that it clearly pictures the future development which must come, and at the same time it is not visionary, because every fact is supported by figures."



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IT DOESN'T make any difference where you go—to Shanghai, Paris or Buenos Aires—the true quality of York Vaults is known and respected everywhere.

When a financial institution wants safety, whether it be in China or America, oceans and continents are no barriers. Recognized as "*the world's most respected vaults*," bankers everywhere look to York for the highest standard of quality.

Just as this bank came to York for the standard of quality it required, so have banks throughout America realized that vaults should be purchased on reputation more than price—and that York Vaults have earned a reputation that is seldom accorded any man-made product.

YORK SAFE and LOCK COMPANY

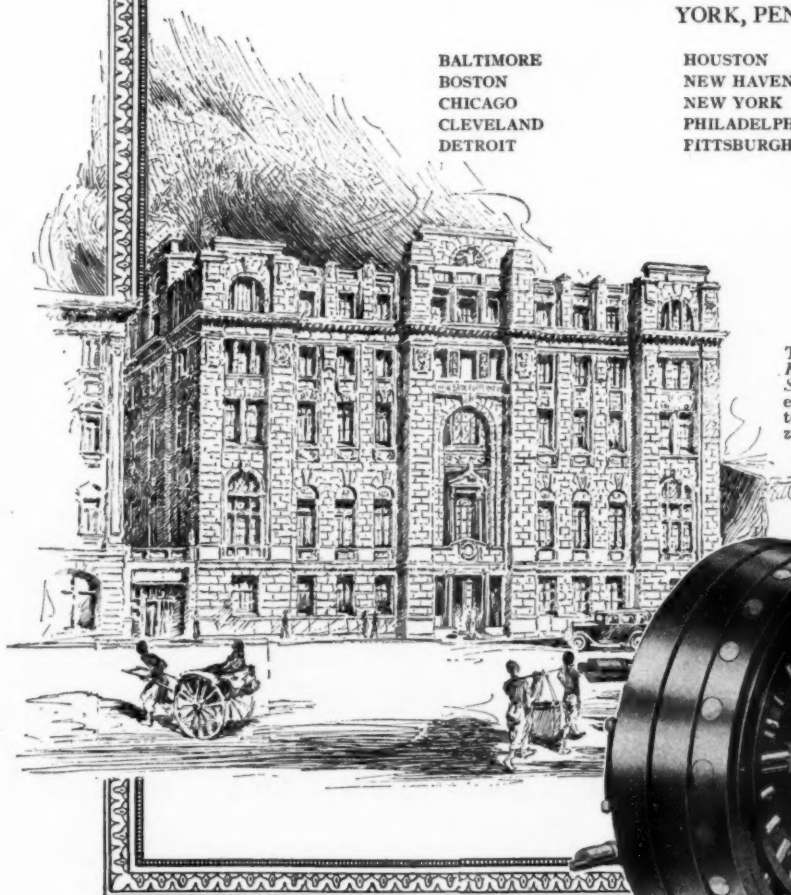
Factory and Principal Office

YORK, PENNA.

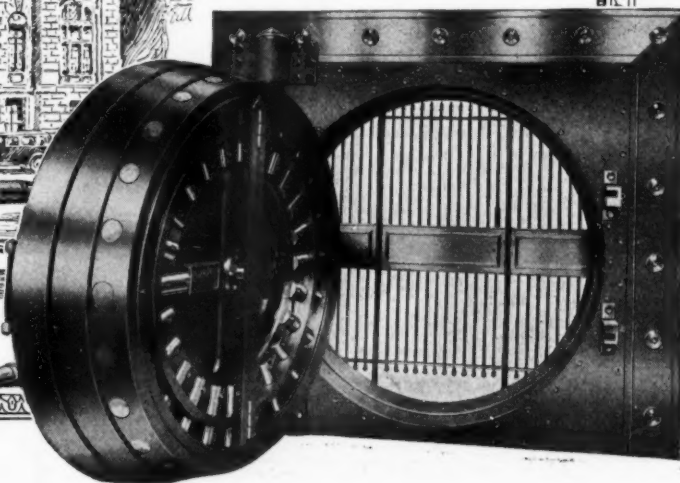
BALTIMORE
BOSTON
CHICAGO
CLEVELAND
DETROIT


HOUSTON
NEW HAVEN
NEW YORK
PHILADELPHIA
PITTSBURGH

ST. LOUIS
SAN FRANCISCO
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This entrance to the vaults of the Kinchong Banking Corporation in Shanghai, China, shows an interesting comparison of modern protection in the world's oldest civilization.






Cloth the economical cement package

When you buy cement you either pay for the bags-- or you do not. cloth sacks cost you--nothing

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7310 WOODWARD AVE., DETROIT, MICH.



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J. Ernest Smith, President and General Counsel.
Chas. Warner Smith, Vice-President.
Harry W. Davis, Secretary and Treasurer.

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in adequate amounts, at fair rates, at all times, for deserving customers.

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John M. Miller, Jr., President

Capital and Surplus Six Million Dollars

Does Your Banking Connection

meet all of your
business requirements?

Write us.

*We invite your inspection of our modern,
burglar-proof and fireproof Safety Deposit
Vaults, which may be rented at small cost.*

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

26 South Street, Baltimore, Md.

Capital and Surplus \$1,350,000.00 Member Federal Reserve System

1884

Southern men and women who lived in, or visited Baltimore in the period when this Company was established—which was the year of 1884—will be interested, we believe, in our anniversary book "The Early Eighties: Sidelights on the Baltimore of forty years ago." A copy will be sent upon request.

MERCANTILE TRUST & DEPOSIT CO. OF BALTIMORE

Resources \$21,000,000 A. H. S. POST, Pres. F. G. BOYCE, Jr., Vice-Pres.

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The Bank of New York & Trust Company has stood by its customers through the storms of the past 142 years, co-operating with them intelligently in bad weather as in fair.

We place our complete banking facilities at your disposal, and invite you to form a permanent connection with us.



Bank of New York & Trust Co.

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THROUGH years of experience, manufacturers have accumulated a mass of information which has helped their customers to overcome difficult problems.

Most likely these same problems represent some of the sales difficulties with new customers.

Put into the form of a booklet or a brief, this information should prove valuable to your new and prospective customers and to your sales organization, clarifying and overcoming many supposed objections and difficulties.

*Write your story
and have it printed in
attractive form for wide
distribution.*

Write us for suggestions and prices.

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7% and 8% Earnings

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"PLAIN FACTS of B. & L."

These facts are covered by three interesting booklets which tell how one may invest \$5.00 monthly or \$10,000.00 lump sum and receive high security and return. They are yours for the asking.

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We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.

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INSPIRATIONAL

Walter A. Richards, City Manager, City of Daytona Beach, Florida writes in reference to the 1927 Blue Book of Southern Progress: "It is inspirational in that it clearly pictures the future development which must come, and at the same time it is not visionary, because every fact is supported by figures."

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A good report by a New York engineer is a great help in interesting New York Banking Houses in the new capital needs of worthwhile companies.

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R. A. TERRELL.....President
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FOSTER HAMILTON.....Cashier

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PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close December 29, 1927.

SEALED BIDS, in triplicate, subject to the conditions contained herein, will be received by the U. S. Veterans' Bureau, Room 791 Arlington Building, Washington, D. C., until 11 A. M. December 29, 1927, and then publicly opened, for furnishing all labor and materials and performing all work for Construction of Buildings and Utilities, including roads, walks and drainage, at U. S. Veterans' Hospital, Portland, Oregon. This work will include excavating, reinforced concrete construction, hollow tile, brick work, cast stone, marble work, floor and wall tile, iron work, steel sash, steel stairs, with slate treads; slate, metal and built-up roofing, roof ventilators, skylight, metal lathing, plastering, carpentry, platform scales, insect screens, metal weather strip, painting, glazing, hardware, plumbing, boiler plant, heating, steel oil tanks and oil burners, electrical work, electric elevators, refrigerating plant and outside sewer, water, steam, gas and electric distribution system. **SEPARATE BIDS** will be received for Building Construction, Plumbing, Heating, Steel Oil Tanks and Oil Burners, Electrical Work, Electric Elevators, Ice-Making and Refrigerating Plant and Radial Brick Chimney, all as set forth on bid form. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and in making awards the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. At the discretion of the Director, drawings and specifications may be obtained upon application to the Construction Division, Room 791 Arlington Building, Washington, D. C. Deposit with application of a check or postal money order for \$100, payable to the **TREASURER OF THE UNITED STATES**, is required as security for safe return of the drawings and specifications within ten days after date of opening bids. **FRANK T. HINES**, Director, November 19, 1927.

\$1,305,000 5% Road Bonds ORANGE COUNTY, FLORIDA

Sealed bids will be received by the Board of County Commissioners of Orange County, Florida, at the office of the Clerk of the Circuit Court of said County, in the Courthouse in Orlando, Florida, until December 12, 1927, at 9 o'clock A. M., for one million three hundred and five thousand dollars road bonds of the said county, the third portion offered for sale of the bonds voted at an election in the said county on March 23, 1926. Said bonds shall be dated July 1, 1926; shall bear interest at the rate of five per cent per annum, payable semi-annually on January 1 and July 1, both principal and interest being payable at the Hanover National Bank, in the City of New York, State of New York, and shall be numbered from 2441 to 3745, inclusive, and shall be payable:

\$395,000 on July 1, 1949
\$435,000 on July 1, 1950
\$475,000 on July 1, 1951

Each of the said bonds being of the denomination of \$1000.

Said bonds have been validated by decree of the Circuit Court of the Seventeenth Judicial Circuit of the State of Florida for Orange County.

Each bid must be accompanied by a certified check for one per cent of the bonds bid for on a National or State Bank, payable to the order of the Clerk of the Circuit Court of Orange County, Florida. It is requested that no bids be made except upon the form provided by the Board of County Commissioners, which will be supplied by the Clerk upon request. The right to reject any and all bids is reserved. The successful bidder will be furnished with the approving opinion of Messrs. Thomson, Wood & Hoffman, Attorneys, of New York City.

For further information address **B. M. Robinson**, Clerk of the Circuit Court, Orlando, Florida.

L. L. PAYNE,
Chairman Board of
County Commissioners.

B. M. ROBINSON, Clerk.

Notice

Tallahassee, Fla.

The City of Tallahassee, Tallahassee, Florida, desires to purchase for its Sinking Funds any of the Bonds issued by said City which are listed below. No offer for any other security is desired.

FUNDS ARE AVAILABLE TO PURCHASE THE ENTIRE LIST.

Code: s—Serial Bond, General Obligation of the City.

Is—Improvement Serial Bond, with Lien as underlying Security.

Maturity	Utility	Municipality	Date Issued	Interest	Purpose or Title
2-1-28		\$5000. s	2-1-23	5%	Street Paving Bonds
3-1-28	\$5000. s		3-1-20	5%	Public Utility Imp. Bonds
6-2-28		5000. Is	6-2-24	6%	Improvement Bonds
7-1-28		2000. Is	7-1-24	6%	Improvement Bonds
2-1-29		5000. s	2-1-23	5%	Street Paving Bonds
3-1-29	5000. s		3-1-20	5%	Public Utility Imp. Bonds
6-2-29		5000. Is	6-2-24	6%	Improvement Bonds
7-1-29		2000. Is	7-1-24	6%	Improvement Bonds
2-1-30		5000. s	2-1-23	5%	Street Paving Bonds
3-1-30	5000. s		3-1-20	5%	Public Utility Imp. Bonds
6-2-30		5000. Is	6-2-24	6%	Improvement Bonds
6-1-30		2000	6-1-25	6%	Grading and Curbing Bonds
7-1-30		2000. Is	7-1-24	6%	Improvement Bonds
2-1-31		5000. s	2-1-23	5%	Street Paving Bonds
3-1-31	6000. s		3-1-20	5%	Public Utility Imp. Bonds
6-2-31		5000. Is	6-2-24	6%	Improvement Bonds
7-1-31		2000. Is	7-1-24	6%	Improvement Bonds
2-1-32		5000. s	2-1-23	5%	Street Paving Bonds
3-1-32	6000. s		3-1-20	5%	Public Utility Imp. Bonds
6-2-32		5000. Is	6-2-24	6%	Improvement Bonds
7-1-32		2000. Is	7-1-24	6%	Improvement Bonds
2-1-33		5000. s	2-1-23	5%	Street Paving Bonds
3-1-33	6000. s		3-1-20	5%	Public Utility Imp. Bonds
4-1-33		2000. s	4-1-27	5½%	Gas Plant Ext. Bonds
4-1-33	4000. s		4-1-27	5½%	Water Works Ext. Bonds
4-1-33		3000. s	4-1-27	5½%	Municipal Incinerator Bonds
4-1-33		1000. s	4-1-27	5½%	Gaines St. Paving Bonds
4-1-33		2000. s	4-1-27	5½%	Sewer Ext. Bonds
4-1-33		3000. s	4-1-27	5½%	Storm Drainage Bonds
6-2-33		5000. Is	6-2-24	6%	Improvement Bonds
7-1-33		2000. Is	7-1-24	6%	Improvement Bonds
\$39,000.		\$83,000.			

B. H. BRIDGES,
City Auditor and Clerk.

Bids close December 14, 1927.

TREASURY DEPARTMENT, office of the Supervising Architect, Washington, D. C., November 16, 1927.—**SEALED PROPOSALS** will be opened in this office at 3 P. M. December 14, 1927, for furnishing all labor and material required for removing the present water-supply piping, etc., and furnishing and installing new brass water-supply piping, etc., in the U. S. Postoffice and Courthouse at Athens, Ga. Drawings and specifications may be obtained from the custodian at the U. S. Postoffice and Courthouse at Athens, Ga., or at this office, in the discretion of the Supervising Architect. **JAS. A. WETMORE**, Acting Supervising Architect.

Bids close January 10, 1928.

\$650,000 6% Bonds

FORT PIERCE INLET DISTRICT
Fort Pierce, Fla.

Sealed bids will be opened at 2 o'clock P. M. on January 10, 1928, for 650 \$1000 coupon bonds of Fort Pierce Inlet District, bearing six per cent semi-annual interest. Bonds mature serially from 1929 to 1958. Approving opinion by Thomson, Wood & Hoffman of New York City.

Write to **E. L. Price**, Chairman, Fort Pierce, Florida, for circular containing full information.

Bids close December 13, 1927.

\$1,000,000 School Building Bonds GREATER GREENSBORO SCHOOL DISTRICT, N. C.

Greensboro, N. C.
Sealed bids will be received until 12 o'clock M. December 13, 1927, for above bonds, dated January 1, 1928, maturing annually January 1: \$20,000, 1931 to 1933: \$25,000, 1934 to 1937: \$30,000, 1938 to 1941: \$35,000, 1942 to 1945: \$40,000, 1946 to 1950: \$45,000, 1951 to 1954, and \$50,000, 1955 to 1958. Denomination \$1000; principal and interest (J and J 1) payable in gold in New York City; general obligations; unlimited tax; interest rate to be bid, either 4¾% or 4½%; approving opinion of **Chester B. Masslich, Esq.**; certification of bonds by **United States Mortgage & Trust Company**, New York City.

Bids must be on a form which, with other information as to the School District, the bonds and the conditions of bidding, will be furnished by the undersigned.

The right to reject all bids is reserved.

T. A. GLASCOCK,
Secretary, Board of Education.

Bids close December 5, 1927.

Highway Construction

Inverness, Fla.

Sealed proposals addressed to Board of County Commissioners, Citrus County, Inverness, Fla., and marked "Sealed Proposal," will be received until 2 P. M. December 5, 1927, to be opened immediately thereafter, for furnishing material, equipment and labor and constructing certain work approximately as follows:

6.20 miles of Highway Clearing and Grubbing, Grading, Paving Foundations, Drainage and Bridge Structures and Appurtenances between Inverness and Sumter County and known as the Rutland Bridge Road.

Each bid is to be on blank forms furnished by the Clerk, and is to be accompanied by a certified check or bid bond issued through a local agency by a bonding company qualified to do business in the State, made payable to Citrus County, for \$5000 or for 5 per cent of bid on any portion less than the whole.

Certified check or bid bond will be forfeited as liquidated damage if contract and bond are not executed within the time specified, if proposal is accepted; otherwise will be returned within ten days.

The right is reserved to reject any and all bids.

Plans and specifications may be seen after November 22 at the office of the Clerk and the offices of the Engineers, and specifications may be obtained from the Clerk upon payment of \$2 to cover cost of reproduction.

C. E. CONNOR, Clerk.
E. V. CAMP AND ASSOCIATES, INC.,
Consulting, Supervising and Testing
Engineers,
Atlanta, Ga.; Inverness, Fla.

Bids close December 13, 1927.

Roads and Bridges

SOUTH CAROLINA STATE HIGHWAY DEPARTMENT COLUMBIA

Columbia, S. C.

Projects upon which bids are to be received on December 13, 1927, at 11 A. M. at the Jefferson Hotel, Columbia, S. C.:

1. Federal Aid Project 96 Reopened, Anderson County—Route 15, from Belton to the end of the pavement near Anderson. Approximately 7.9 miles in length, to be graded, drainage structures built and surfaced with 5-inch Portland cement concrete base, 18 feet wide, with 2-inch asphaltic concrete surfacing.
2. Federal Aid Project 95 Reopened, Beaufort County—Route 28, from Beaufort to the intersection of Routes 28 and 17 near Pocotaligo. Approximately 22.4 miles in length, to be graded, drainage structures built and surfaced with an 18-foot Portland cement concrete pavement.
3. State Project 666, Calhoun County—Routes 2 and 45, from St. Matthews toward Columbia. Approximately 6.0 miles in length, to be graded, drainage structures built and surfaced with an 18-foot 0-inch Portland cement concrete pavement.
4. Charleston County—Route 17, approaches to the Ashley River bridge, John's Island overhead bridge and the Wallace Creek bridge. Approximately 1.0 mile in length. The approaches to Ashley River bridge to be a 5-inch concrete base with a 3-inch sheet asphalt surfacing; the approaches to the John's Island overhead bridge and the Wallace Creek bridge to be a Portland cement concrete pavement.
5. Federal Aid Projects 198 and 278, Cherokee County—Route 29, from Blacksburg to the N. C. line near Grover. Approximately 6.2 miles in length, to be graded, drainage structures built and surfaced with an 18-foot 0-inch Portland cement concrete pavement. At the request of Cherokee County, alternate bids will be received on 3-inch sheet asphalt surfacing on 5-inch Portland cement concrete base.
6. Federal Aid Project 207-D, Cherokee County—Route 11, from Gaffney towards Jonesville. Approximately 5.0 miles in length, and State Project 660, Cherokee County—Route 11, from Gaffney towards Chesnee. Approximately 5.3 miles in length, to be graded, drainage structures built and surfaced with an 18-foot 0-inch Portland cement concrete pavement. At the request of Cherokee County, alternate bids will be received on 3-inch sheet asphalt surfacing on 5-inch Portland cement concrete base.
7. Federal Aid Projects 180 Reopened and 227-A, Florence County—Route 17, from Effingham through Cowards, Scranton and Lake City to the Williamsburg County line. Approximately 16.1 miles in length, to be graded, drainage structures built and surfaced with an 18-foot 0-inch Portland cement concrete base 5 inches thick and a 2-inch asphaltic concrete surfacing.
8. Federal Aid Project 79 Reopened, Jasper County—Route 17, from Coosawhatchie towards Yemassee. Approximately 5.9 miles in length, to be graded, drainage structures built and surfaced with an 18-foot 0-inch Portland cement concrete pavement.
9. Federal Aid Project 234-B and C Reopened, Lexington County—Route 3, from the intersection of Routes 3 and 6 below Swansea to the intersection of Routes 2 and 3 near Dixiana. Approximately 12.9 miles in length, to be graded, drainage structures built and surfaced with Portland cement concrete pavement.
10. Federal Aid Project 171-B, Contract No. 2, Marion County—U. S. Route 17. Approximately 8.0 miles in length, to be surfaced with an 18-foot 0-inch Portland cement concrete base 5 inches thick, with 2-inch asphaltic concrete surfacing.
11. Federal Aid Projects 141 and 214, Reopened, Saluda County—Route 39, from the Edgefield County line through Ward, Ridge Springs, Monetta to Batesburg. Approximately 15.3 miles in length, to be graded, drainage structures built and surfaced with 5-inch Portland cement concrete base, with 2-inch asphaltic concrete surfacing.
12. Federal Aid Project 227-B, Williamsburg County—U. S. Route 17, from the Florence County line through Cades to Kinstree. Approximately 12.8 miles in length, to be graded, drainage structures built and surfaced with an 18-foot 0-inch Portland cement concrete pavement.
13. State Project 654-A, Dillon County—

Route 9, from Dillon toward Lake View. Approximately 4.5 miles in length, to be graded and drainage structures built.

14. Federal Aid Project 258-B, Edgefield County—Route 19, the approaches to the underpass under the Southern Railroad at Salters Pond, between Johnston and Trenton. Approximately 1.6 miles in length, to be graded, drainage structures built and surfaced with sand clay.

15. State Project 663-B and C, Lexington-Richland Counties—From the Saluda River Dam site via Irmo to Route 2. Approximately 5.0 miles in length, to be graded and drainage structures built.

16. State Project 511-B, Richland County—Route 215, from the end of present paving contract near Hinnants Store to the Fairfield County line at Little River. Approximately 2.2 miles in length, to be graded and drainage structures built.

17. Federal Aid Project 111-C Bridge, Bamberg-Orangeburg Counties—Route 21, between Branchville and Smoaks over the Edisto River, consisting of the construction of one (1) concrete and creosoted timber bridge 675 feet long, 225 feet of which is concrete and 450 feet of treated timber, over the river proper and three creosoted timber bridges in the swamp, one (1) 330 feet long, one (1) 255 feet long and one (1) 195 feet long.

18. State Project 654-A Bridge, Dillon County—Route 9, between Dillon and Lake View, over the Little Pee Dee River, consisting of the construction of one (1) concrete bridge 198 feet long and the widening of three (3) existing bridges.

19. Federal Aid Project 227-A Bridge, Florence County—Route 17, over Lake Swamp near Lake City, consisting of the construction of a concrete bridge over the swamp 275 feet long.

20. Federal Aid Project 264 Bridge, Newberry County—Route 2, consisting of the construction of two (2) concrete overhead bridges over the C. N. & L. R. R., one (1) near Newberry and the other near Jalapa, each bridge 170 feet long.

21. State Project 635-A Bridge, Oconee County—Route 18, between Westminster and Long Creek, consisting of the construction of a concrete bridge 200 feet long over Chauga Creek.

22. State Project 648 Bridge, Oconee County—Route 182, between Fairplay and Knox Bridge, consisting of the construction of a creosoted timber bridge 75 feet long.

A more detailed description of these projects will be published later and proposal forms will be available about December 1, 1927.

BEN M. SAWYER,
Chief Highway Commissioner.

Bids close December 7, 1927.

Asphalt Paving

DEPARTMENT OF PUBLIC WORKS BUREAU OF HIGHWAYS

Baltimore, Md., November 23, 1927.

Sealed proposals, executed in duplicate, addressed to the Board of Awards, care of the City Register, will be received by him in his office until 11 A. M. Wednesday, December 7, 1927, to grade, curb and pave with Sheet Asphalt on Concrete Base the streets listed in Contract No. 443.

Contract No. 443
Sheet Asphalt, 7080 square yards
Certified check \$800

Specifications and proposal sheets and all other information can be obtained at this office, Room 207½ City Hall. A charge of \$10 will be required for specifications covering this contract, which charge will not be refunded.

The Board of Awards reserves the right to reject any or all bids. A certified check of the bidder on a clearing-house bank, drawn to the order of the Mayor and City Council of Baltimore, to the amount as recited in the specifications must accompany each bid.

Bond in the amount of the contract price will be required of the successful bidder.

NATHAN L. SMITH,
Highways Engineer.

Approved: WM. F. BROENING,
President Board of Awards.

Approved: C. F. GOOB,
Chief Engineer.

Approved: JOSEPH PATTI, JR.,
Assistant City Solicitor.

Bids close December 7, 1927.

Bridge Superstructure

Fayetteville, W. Va.

SEALED proposals will be received by the County Court of Fayette County, West Virginia, at the Courthouse in Fayetteville until 10 o'clock A. M. on the 7th day of December, 1927, and opened and read immediately thereafter, for the construction of Superstructure for Bridge over New River at Stone Cliff, West Virginia. The following span lengths:

- 1 90-foot Thru Truss.
- 1 190-foot Deck Truss.
- 1 90-foot Deck Truss.

Reinforced concrete floor, 20-foot roadway. Proposals will be received only upon standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the County Road Engineer at Fayetteville, West Virginia.

Each proposal must be accompanied by a certified check in the amount of \$4000.

The right is reserved to reject any and all proposals.

THE COUNTY COURT OF FAYETTE
COUNTY, WEST VIRGINIA.
By J. C. HURT, Clerk.

Bids close December 5, 1927.

Water Distribution System

BEAVER DAM WATER AND SEWER DISTRICT

Asheville, N. C., November, 1927.

Sealed bids will be received until 12 o'clock M. the 5th day of December, 1927, and publicly opened, by the Trustees of the Beaver Dam Water and Sewer District of Buncombe County, North Carolina, in the office of the Howerton Engineering Company, 410 New Medical Building, Asheville, N. C., for furnishing all labor, tools, machinery, equipment, materials and everything incident and necessary and required in the construction of a water-distribution system in the Beaver Dam Water and Sewer District.

All information may be obtained from the Howerton Engineering Company, Asheville, N. C. Plans and specifications may be had from said Engineers upon the receipt of a deposit of \$10, one-half of this amount to be refunded upon the return of said plans and specifications in good condition upon the date of the letting.

All bids shall be sealed and marked "Water Distribution System Bids" and addressed to the Trustees of the Beaver Dam Water and Sewer District, Asheville, N. C., together with a certified check in the sum of ten per cent of the total amount of the bid, as evidence of good faith and as a guarantee that, if awarded the contract, the bidder will execute a contract bond in the sum of fifty per cent of the amount bid in form as required with a satisfactory corporation as surety. The certified check is to be forfeited in the event the bidder fails to execute such satisfactory bond within ten days of the date of the award. The Trustees shall be the sole judges as to the bonds they will accept.

The Trustees reserve the right to reject any and all bids or to accept the bid most advantageous to the Beaver Dam Water and Sewer District.

No bids will be considered except those meeting all of the terms and conditions of this advertisement and all of the terms and conditions of the plans and specifications.

The approximate quantities of the work are as follows:

- Section 1—
36,450 Ft. 6-inch Cast-Iron Pipe.
14,800 Ft. 12-inch Cast-Iron Pipe.
10,000 Ft. 2-inch Galvanized Wrought-Iron Pipe.
40 Hydrants.
78 Gate Valves.

- Section 2—
1 500,000-Gallon Reinforced Concrete Reservoir.
1 Pumping Station.
10,000 Ft. 8-inch Cast-Iron Pipe.
6,000 Ft. 6-inch Cast-Iron Pipe.

The proposals of contractors who are not licensed to do business in the State of North Carolina as required by law will not be considered.

TRUSTEES.

R. E. HOLCOMBE, Chairman.

J. A. STRADLEY.

CHESTER BROWN.

HOWERTON ENGINEERING CO.,
Engineers,
Asheville, N. C.

Bids close December 12, 1927.

Water Mains and Appurtenances

Towson, Md., November 8, 1927.

Sealed Proposals, addressed to the County Commissioners of Baltimore County and endorsed bids for excavation and the laying of water mains and appurtenances thereto, in "ROSEMONT AND ENGLISH CONSUL, Contract 14-W and 15-W; STONELEIGH, GRAY MANOR AND FALLS ROAD, Contract 16-W and 17-W; SOLLERS POINT ROAD, TURNERS STATION AND MIDDLE RIVER, Contract 18-W and 19-W," will be received at their office in the Courthouse, Towson, Maryland, until 11 A. M., Eastern Standard time, on December 12, 1927 next, when they will be publicly opened and read.

Approximate list of quantities of Contract No. 14-W (Excavation and Refill):

- 10,680 Lin. Ft. earth excavation and refill for 6-inch pipe.
- 4,205 Lin. Ft. earth excavation and refill for 8-inch pipe.
- 3,315 Lin. Ft. earth excavation and refill for 12-inch pipe.
- 175 Cu. Yds. Class "A" rock excavation and earth refill.
- 125 Cu. Yds. Class "B" rock excavation and earth refill.
- 75 Cu. Yds. Class "C" rock excavation and earth refill.
- 25 Cu. Yds. miscellaneous and test pit earth excavation and refill.

Miscellaneous items, including cinder, gravel and concrete repaving.

Approximate list of quantities of Contract No. 15-W (Pipe Laying):

- 11,805 Lin. Ft. laying 12-foot lengths, 6-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 4,650 Lin. Ft. laying 12-foot lengths 8-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 3,665 Lin. Ft. laying 12-foot lengths 12-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.

9 Placing fire hydrants.

Miscellaneous items.

Approximate list of quantities of Contract No. 16-W (Excavation and Refill):

- 7,400 Lin. Ft. earth excavation and refill for 6-inch pipe.
- 3,400 Lin. Ft. earth excavation and refill for 8-inch pipe.
- 475 Lin. Ft. earth excavation and refill for 10-inch pipe.
- 6,600 Lin. Ft. earth excavation and refill for 12-inch pipe.
- 500 Lin. Ft. earth excavation and refill for 16-inch pipe.
- 300 Cu. Yds. Class "A" rock excavation and earth refill.
- 200 Cu. Yds. Class "B" rock excavation and earth refill.
- 200 Cu. Yds. Class "C" rock excavation and earth refill.
- 25 Cu. Yds. miscellaneous and test pit earth excavation and refill.

Miscellaneous items, including cinder, gravel and concrete repaving Lump Sum Crossing N. C. R. R. tracks on Falls Road.

200 Lin. Ft. excavating trench, furnishing and laying 8-inch Vit. pipe.

Approximate list of quantities of Contract No. 17-W (Pipe Laying):

- 8,182 Lin. Ft. laying 12-foot lengths 6-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 3,313 Lin. Ft. laying 12-foot lengths 8-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 525 Lin. Ft. laying 12-foot lengths 10-inch mains, valves and fittings, lead joints.

Alternate bid, leadite joints.

Alternate bid, 16-foot lengths, lead joints.

7,270 Lin. Ft. laying 12-foot lengths, 12-inch mains, valves and fittings, lead joints.

Alternate bid, 16-foot lengths, lead joints.

Alternate bid, 16-foot lengths, leadite joints.

1,103 Lin. Ft. laying 12-foot lengths 16-inch mains, valves and fittings, lead joints.

Alternate bid, leadite joints.

Alternate bid, 16-foot lengths, lead joints.

Alternate bid, 16-foot lengths, leadite joints.

15 Placing fire hydrants.

Miscellaneous items.

Approximate list of quantities of Contract No. 18-W (Excavation and Refill):

- 5,550 Lin. Ft. earth excavation and refill for 6-inch pipe.
- 300 Lin. Ft. earth excavation and refill for 8-inch pipe.
- 12,870 Lin. Ft. earth excavation and refill for 10-inch pipe.
- 3,560 Lin. Ft. earth excavation and refill for 12-inch pipe.
- 300 Cu. Yds. Class "A" rock excavation and earth refill.
- 200 Cu. Yds. Class "B" rock excavation and earth refill.
- 100 Cu. Yds. Class "C" rock excavation and earth refill.
- 25 Cu. Yds. miscellaneous and test pit earth excavation and refill Lump Sum Crossing Pa. R. R. tracks at Middle River.
- 528 Lin. Ft. excavating trench, furnishing and laying 8-inch Vit. pipe.

Miscellaneous items, including cinder, gravel and concrete repaving.

Approximate list of quantities of Contract No. 19-W (Pipe Laying):

- 6,050 Lin. Ft. laying 12-foot lengths 6-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 300 Lin. Ft. laying 12-foot lengths 8-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 13,210 Lin. Ft. laying 12-foot lengths 10-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.
- 3,955 Lin. Ft. laying 12-foot lengths 12-inch mains, valves and fittings, lead joints.
- Alternate bid, leadite joints.
- Alternate bid, 16-foot lengths, lead joints.
- Alternate bid, 16-foot lengths, leadite joints.

248 Lin. Ft. laying 12-inch pipe on brackets furnished by Commissioners on Middle River Bridge.

248 Lin. Ft. covering 12-inch pipe on Middle River Bridge.

22 Placing fire hydrants.

Miscellaneous items.

Each bid, excavating and laying, must be separately totaled and each accompanied by a certified check for one thousand (\$1000) dollars, payable to the County Commissioners, as a guarantee that the successful bidder will sign the contract.

A bond for an amount equal to the amount of the bid of a surety company satisfactory to the Commissioners will be required of the successful bidder. A copy of the Specifications, Plans and Drawings will be furnished prospective bidders on receipt of a certified check for Twenty-five (\$25) Dollars, refund of which will only be made upon receipt of a bona fide bid and return of the specifications and drawings to the office of the Chief Engineer of the Baltimore County Metropolitan District within ten (10) days after the opening of bids and award of the contract. No specifications or drawings will be issued after Thursday, December 8, 1927. Specifications and drawings can be seen at the office of the Chief Engineer of the Baltimore

County Metropolitan District, Towson, Maryland, after November 21, 1927.

Consideration will be given bidders' experience (must be stated in or attached to the bid), financial standing and reputation for having done successful work of the kind specified without controversy or litigation, and the Commissioners reserve the right to reject any or all proposals or bids, or proposals or bids that contain items exceedingly high or low, or to accept any proposal or bid or parts of bids, or to separate the bid for excavation and refill from laying of the pipe and setting hydrants, or to award the contract to one bidder or divide it among several bidders, or to waive technicalities, as they may deem best for the interest of the county.

By order of the Board.
JOHN R. HAUT, Chief Clerk.
A. E. WALDEN, Chief Engineer.

Bids close December 15, 1927.

Highway

Baton Rouge, La.

Sealed Proposals will be received by the LOUISIANA HIGHWAY COMMISSION at their office in the Raymond Building, Baton Rouge, Louisiana, up to 11 o'clock A. M.

THURSDAY, DECEMBER 15, 1927, at which time and place they will be publicly opened, for paving the following Highway:

Federal Aid Project 154-A, Bossier Parish, Bossier City-Arkana Highway. Length, 12.935 miles.

Project 154-A begins at a point on the Shreveport-Minden Highway about one mile east of the Red River Bridge and extends through Brownlee and Vancerville to the north side of Fifth Street, in Benton. Width of pavement will be 20 feet and bids are invited for 2-inch Warrenite Bitulithic, 2-inch Bituminous Concrete (Modified Topoka Type) and 2½-inch Sheet Asphalt wearing surface on a 7-inch-5-inch-7-inch concrete base, 1:2.5:5 concrete, and for Reinforced Concrete Pavement 8-inch-6-inch-8-inch of 1:2:3-5 concrete.

Information as to the location, character of work, extent and class of material, terms of payment, regulations governing manner of submitting proposals and executing contract may, on application, be obtained at the office of the Louisiana Highway Commission, Raymond Building, Baton Rouge, Louisiana. Plans and specifications may be inspected at the office of the Commission in Baton Rouge, or will be furnished upon receipt of \$5.00 as payment therefor, not to be refunded. Each bid shall be submitted on a form furnished by the Commission and shall be placed, together with the proposal guaranty, in a sealed envelope so marked as to indicate its contents without being opened. This envelope shall then be placed in another, which shall be sealed and addressed to the LOUISIANA HIGHWAY COMMISSION, REYMOND BUILDING, BATON ROUGE, LOUISIANA.

FRANK T. PAYNE, Chairman,
LOUISIANA HIGHWAY COMMISSION.
NICHOLLS W. BOWDEN,
State Highway Engineer.

Bids close December 6, 1927.

Storm Sewers

Laredo, Texas, November 12, 1927.

Sealed proposals will be received by the City Council of the City of Laredo, Texas, until Tuesday, December 6, 1927, at 7.30 o'clock P. M. and then publicly opened and read, for furnishing materials and constructing Storm Sewers and appurtenances, consisting of the following approximate quantities:

- 5700 Cu. Yds. Earth Excavation.
- 10 Cu. Yd. Rock Excavation.
- 420 Lin. Ft. 24-inch Pipe.
- 510 Lin. Ft. 18-inch Pipe.
- 4115 Lin. Ft. 15-inch Pipe.
- 4995 Lin. Ft. 12-inch Pipe.
- 30 Manholes.
- 20 Cu. Yds. 1-2-4 Concrete.
- 1050 Lbs. Reinforcing Steel.

And necessary accessories.

Each bid will be accompanied by a certified check for Two Hundred (\$200) Dollars, drawn in favor of the City Treasurer of Laredo, Texas. Plans and specifications may be seen at the office of the City Engineer, 211 Alexander Building, Laredo, Texas.

The city reserves the right to reject any or all bids.

(Signed) ALBERT MARTIN, Mayor.

Attest:
(Signed) A. R. GARCIA,
City Secretary.

Bids close December 14, 1927.

Courthouse and Jail

CHEROKEE COUNTY COURTHOUSE

Canton, Ga.

Sealed proposals will be received on or before 12 o'clock noon, Central time, December 14, 1927, at the Bank of Canton, Georgia, for the following work and under the following rules and conditions:

The building is to be located on the property of the county, located in Canton, Ga., at the northwest corner of North Main Street and North Church Street, and is to be a modern reinforced concrete frame building, with brick and marble enclosing walls, two stories and basement in part and four stories and basement in part. The building will cover an area on the ground of approximately 93 feet by 82 feet; otherwise as described in complete detail in plans, specifications and bid blank.

Bids will be received upon the following work, as more specifically shown and specified by the plans and specifications:

1—General Contractor's work (including mechanical work).

2—Jail work.

Plans and specifications for the above, together with bid blank, can be secured from A. Ten Eyck Brown, Architect, 717-20 Forsyth Building, Atlanta, Ga., upon deposit of a certified check for \$10, this check to be retained until the return of the plans and specifications in complete shape to the Architect. Plans and specifications, together with copy of contract, to be signed by successful bidder, showing the extent and character of the work to be done and the terms and time of payment, bond to be required, etc., are on file with said Architect and in the office of the Commissioner of Roads and Revenues of Cherokee County, Georgia, and are hereby referred to for a more detailed statement.

All bids to be considered must be received on or before 12 o'clock noon, Central time, December 14, 1927, and must be submitted on blanks to be furnished by the Architect covering formal items as called for by the specifications; each bid must be accompanied by a certified check for 2% of base bid, payable to E. A. McCanness, Chairman, as agreed liquidated damages in case the low

bidder fails to sign contract and make proper bond.

The form of contract to be used will be that of the American Institute of Architects, Fourth Edition, 1925, as approved by the National Association of Builders.

All bids should be addressed to Mr. E. A. McCanness, Chairman Board of New Courthouse Commissioners, Canton, Ga., with the contents of each bid plainly marked on cover.

The right is reserved to reject any or all bids.

COUNTY OF CHEROKEE, GEORGIA.
By the New Courthouse Commissioners of Cherokee County; E. A. McCanness, Chairman thereof, and W. E. Reece, Clerk; R. Olin Fincher, Commissioner of Roads and Revenues of Cherokee County, Ga.

Bids close December 19, 1927.

Sanitary Sewer System

Avon Park, Fla.

Sealed proposal for furnishing material and constructing sanitary sewers, sewage-disposal plant and a sewage pumping station for the City of Avon Park, Florida, will be received by the City Council at the City Hall until two (2) P. M. December 19, 1927.

The work will consist of approximately 3.5 miles of sanitary sewers, sizes 6 in., 8 in., 12 in. and 15 in.; 1.5 miles of 10-in. cast-iron force main, sewage pumping station and disposal plant.

Each proposal must be accompanied by a certified check, payable to the City of Avon Park, Fla., to an amount equal to five (5%) per cent of the bid as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. Payments will be made in cash on monthly estimates.

Plans and specifications are on file in the office of the City Clerk and City Engineer at Avon Park, Fla., and with Wiedeman & Singleton, Engineers, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies of specifications from the Engineers or the City Clerk by enclosing certified check for fifteen (\$15) dollars, payable to the City of Avon Park.

If blueprints are desired, they may be had at the cost of printing. If plans, specifications and blueprints are returned within thirty days after opening bids, the check for fifteen dollars will be returned.

WILLIAM KING, Mayor.
E. P. LACEY, City Engineer.
LOUISE BROWN, City Clerk.
WIEDEMAN & SINGLETON,
(Successors to Paul H. Norcross),
Engineers,
1404 Candler Building,
Atlanta, Georgia.

Bids close December 7, 1927.

800-Gallon Tank Trailer

BUREAU OF WATER SUPPLY

Baltimore, Md.

Sealed bids, in duplicate, endorsed "Proposals for Furnishing and Delivering one Four-Wheel 800-Gallon Tank Trailer to the Bureau of Water Supply," addressed to the Board of Awards of Baltimore City, will be received at the office of the City Register, City Hall, Baltimore, Md., until 11 A. M., Standard Time, December 7, 1927, at which time they will be publicly opened and read.

Specifications and proposal forms may be obtained at the office of the Water Engineer Room 205 City Hall, Baltimore, Md., on and after November 25, 1927. A charge of \$10 will be made for each set of specifications. This amount will be refunded upon their return in good condition, either by the submission of a bid or to Room 205 City Hall, not later than the date of opening bids.

All bids must be accompanied by a certified check of the bidder on a clearing-house bank for the sum of Four Hundred Dollars (\$400), drawn to the order of the Mayor and City Council of Baltimore, and the successful bidder will be required to give satisfactory bond for the faithful performance of the agreement equal in amount to the value of the contract.

The Board of Awards reserves the right to reject any or all bids.

Approved:

EDWARD G. ROST,
Water Engineer.
C. F. GOOB,
Chief Engineer.



CLASSIFIED OPPORTUNITIES



MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

LIMESTONE DEPOSITS

FOR SALE—Limestone Deposits, unlimited supply, near Hawkinsville, Ga.
ROBT. S. ANDERSON,
Hawkinsville, Ga.

GYPSUM MINE

FOR SALE—Gypsum mine near Havana, Cuba. Finest quality, reasonable price; also small and large tracts of land near Havana suitable for subdivision purposes or trucking.
BEERS & COMPANY, Realtors,
Havana, Cuba.

SILICA SAND

FOR SALE—Sand at Pit. Thousands of yards of sharp sand testing 99.6 and higher, pure silica. Two miles from R. R. and eight miles from deep water. Price is right. In Florida. No. 6831, Manufacturers Record.

COLONIZATION LAND

COLONIZATION TRACT—50,000 acres surrounding county site of Baldwin County, Ala.; one of the most fertile and best advertised counties in South; \$10 per A. Terms. J. D. Clark, 416-17 Meaher Bldg., Mobile, Ala.

BUSINESS AND INVESTMENT PROPERTIES

FOR SALE—Four-story brick building, 100x150, on lot 150x200, in business center of city, suitable for storage of 600 autos; 20% on investment; easy terms. P. O. Box 658, Chattanooga, Tenn.

FARM, FRUIT AND TRUCK LANDS

FLORIDA

"FLORIDA BOUND."

If you enjoy Life, you'll Love FLORIDA; "everybody" is going to FLORIDA this season—some for its Superb Climate, others to make safe and solid investments now, while it's still "bargain time," and return later to live; others to buy an inexpensive little home, Poultry Ranch, Truck Farm or Grove and "take life easy." We can "fit you up." Send today for booklet and list. TAMPA-WEST COAST REALTY CO. (INC.), Realtors, Opp. P. O. "Since Before the War," Tampa, Florida.

NORTH CAROLINA

If interested

FOR HOME OR FOR INVESTMENT
In the great and rapidly developing
STATE OF NORTH CAROLINA,
especially in its leading city, Charlotte, or
in a Southern Cotton Mill or Southern Mill
Stocks, write to

F. C. ABBOTT & CO.,
Realtors and Investment Bankers
Nearly thirty years in Charlotte.

TEXAS

50-ACRE FARM and good home for sale, on highway, near school. Apply to F. L. DURBON, Route Box Hondo R. A., Medina County, D'Hanis, Texas.

WE CONTROL 2,000,000 acres of land in South Texas; 10,000-20,000 acres, \$20 acre. Wanted colonizers, capital to finance; millions profits. Agent, 211 West Craig, San Antonio, Texas.

FARM, FRUIT AND TRUCK LANDS

TEXAS

"TEXAS 'WINTER GARDEN' LANDS."

A subdivision in 20-40 acre tracts, cleared and irrigated; suitable for Citrus Fruits, Winter Vegetables, Staple Crops. Reasonable prices. INVESTIGATE our proposition TODAY.

BERMUDA LANDS COMPANY, Realtors,
501-4 Houston Building,
San Antonio, Texas.

SUB-DIVISION PROPERTY

ATTENTION, Townsite Companies—I own 365 acres, high and overlooking city of Jacksonville, Texas, new Oil Town in Cherokee Co. This acreage one-third in city limits, balance adjoining water and sewerage line adjoining gas and electric lines running through property. Ideal for industrial and subdivision. F. E. Churchill, Jacksonville, Texas.

HOTEL FOR SALE

HOTEL IN FLORIDA

Small hotel, with big future, for sale in the high ridge lake section of Northern Florida. All-year demand. Winter resort for Northern people and summer resort for Floridians. This is a bona fide going proposition in one of Florida's most favored and strategic spots. Thorough investigation invited. References as to character, ability and responsibility required. Address
J. E. LARSON, Keystone Heights, Fla.

NEW JERSEY REAL ESTATE

NORTHERN NEW JERSEY REAL ESTATE
Manufacturing plants and sites, with railroad siding and some with waterfronts. Acreage, beautiful houses, cozy bungalows, stores, seashore property.

Also in Rahway and environs, where the Lincoln, Seashore and Vehicular Tunnel highways converge with the main line of the P. R. R., 20 miles to New York, 90 commuter trains daily. Millions of autos pass through Rahway annually. Combination of railroad and motor transportation makes Rahway good base for serving greater New York and nation.

Frontage on highways suitable for manufacturing wholesale and retail exhibiting and selling products for local and national distribution.

Confidential correspondence invited. Write for photos. Phone, Rahway 1333.
PETER A. SENSENIG, 10 W. SCOTT AVE.
at Scott Ave. Sta., RAHWAY, N. J.

BUSINESS OPPORTUNITIES

LOUISIANA

Going Building-Material Business in one of the fastest-growing cities of the South at a reasonable price. Reason for selling other interests; cannot give full time to this business. For particulars address No. 6823, care of Manufacturers Record, Baltimore, Md.

INDUSTRIAL PLANTS

FOR RENT—Modern daylight factory building, Fredericksburg, Va.; 10,000 sq. ft. floor space; good opportunity. Address inquiries to the Secretary, PHILIP N. STERN, Fredericksburg, Va.

COMPLETE PLANING MILL for sale. Account husband's death, will sacrifice complete planing mill ready to run, in excellent location and thriving town. Address Mrs. A. F. Young, Executrix, 815 Bunch Street, Corinth, Miss.

FACTORY SITES

SAN ANTONIO, TEXAS—For Sale, excellent piece of trackage warehouse property, 225 ft. on M. K. & T. tracks, 200 feet deep, near depot. Consideration \$15,000. Diemann Construction Co., 306 E. Commerce street, San Antonio, Texas.

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FOR SALE—360 acres, situated 8 miles from business center of Atlanta; about 3000 feet railroad frontage; suitable for large industries and their village sites.
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ENGINEERING REPORTS on resources of cities and towns. Recommendations for industrial development made by specialists in locating industries.

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MANUFACTURERS AND REPRESENTATIVES' SERVICE BUREAU
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AGENCIES—DEALERS.

Territories for sale of steel windows open in many parts of the United States. Write us for particulars. **ALLISON STEEL PRODUCTS COMPANY**, Chester, Pa.

MANAGING PROPRIETOR of manufacturers' agency, representing nationally advertised building specialties, desires change of location. Will purchase interest or all of well-established agency; references furnished. No. 6827, care Manufacturers Record.

MANUFACTURER'S AGENT
traveling Mississippi south of A. and V. R. R. solicits responsible accounts on commission basis.

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ESTABLISHED MANUFACTURERS' selling agency located in Florida, representing some nationally advertised building specialties, desires two to four additional lines. Pleasant relations with architects and contractors. References furnished. Address No. 6835, care of Manufacturers Record.

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Good, live machinery distributors wanted to handle the complete line of **OSGOOD** gasoline, steam or electric powered shovels, cranes, draglines and back hoes. Excellent territories open throughout the South and Middle West.

THE OSGOOD COMPANY,
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MR. MANUFACTURER—Are you represented in the industrial and fast-growing Piedmont Section of North Carolina? A gentleman 46 years of age, with 15 years' experience selling mechanical specialties, who is well acquainted with the executives of large industrial enterprises in the territory stated above, wants to represent manufacturers of staple lines on a commission basis. No salary or drawing account wanted. Banking and business references will be gladly given. Address R. G. S., 201 West Bessemer Avenue, Greensboro, N. C.

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WANTED—Purchasing Agent for Steel Company in Eastern Pennsylvania. Reply, No. 6829, care of Manufacturers Record, Baltimore, Md., stating age, experience and salary desired.

SALESMAN WANTED—Our proposition offers greater earning possibilities to the real salesman than is offered to him in most any other line. A credit and collection service with a bonded recovery obligation. American Security Credit Company, General Offices, St. Louis, Mo.

WANTED—By a Structural Steel Plant, a competent foreman for a department handling miscellaneous and ornamental work. Smokestack work, stairways, railings, pipe work and very light structural work must be understood. There is a fine opportunity for a live wire and a chance for promotion. Ideal location in the South. Address No. 6834, care Manufacturers Record, Baltimore.

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service, of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements; your identity covered and present position protected. Established seventeen years. Send only name and address for details.
R. W. BIXBY, INC.,
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Successful salesman, experience selling power plants, can secure permanent, profitable connection. Acquaintance with industrial buyers desirable. Proven products, backed by a Surety Bond. Sell to every industrial plant, public institution, hotel and all buildings. 100% co-operation. Personal training given. Give details. Replies confidential. Position available January 1, 1927.

THE NORTH AMERICAN FIBRE PRODUCTS COMPANY

Cleveland, Ohio

CONTRACT WORK WANTED

DEPENDABLE COMPANY, with 45 years' experience, operating well-equipped and extensive plant consisting of Pattern Shop, Foundry, Machine Shop, Forge and Structural Shop, supported by skilled mechanics and capable engineers, wants connection with reliable consulting and contracting Engineers and others who desire a plant to manufacture Machinery and Equipment to meet their requirements. Plant facilities suitable for the manufacture of light or heavy units. Grey Iron and Semi-steel castings up to 40,000 lbs.; Brass and Aluminum up to 1000 lbs. Address No. 6796, care of Manufacturers Record, Baltimore, Md.

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FOR SALE—Oak or Cypress structural and railroad timbers and plank cut to order, Poplar and Gum Squares or dimensions. Inquiries solicited.

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14x30 TIMBER SIZER (1 only). 1 18x42 and 14x36 left-hand Corliss Engine. This machinery is in fine condition, and we are going to sell it at some price, as we need the space.

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Barges, lighters and scows	machine shop	double end—horizontal
Brakes, tinsmiths'	Drills, radial	and vertical—24" to 60"
Cars—Std. Ga. Flat and	Grinders	Riveters, bull—to 10' 6"
Gondola	Hammers, drop-board lift	gap
Compressors, air—elec-	and steam	Rolls, straightening
tric and steam driven—	Hammers, steam	Rolls, bending—8' to 32'
up to 6000 cu. ft.	Hoists, electric, steam,	—horizontal and vertical
Converts, electric rotary	hydraulic and hand	Rolls, joggling
Cranes, electric and hand	Jointers	Sanders, wood
—3 to 50 tons—15' to	Launches	Saws, band
150' spans	Locomotives, yard	Saws, rip
Cranes, hammerhead	Machines, bolt	Saws, wood and steel
cantilever revolving—	Machines, countersinking	Shapers, wood
10 to 75 ton cap.	Machines, pipe bending	Sloters
Cranes, locomotive	Machines, pipe expanding	Surfacers
Cutters, bolt—single and	Machines, pipe threading	Tenoners
double head	Motors, electric	Trucks, electric—3½ ton
Drills, boiler shell—vert-	Moulders—Woodworking	to 5 ton
ical	Mortisers—Woodworking	Trucks, motor—Mack and
		Dodge—1 ton to 5½
		ton

also, other items too numerous to classify

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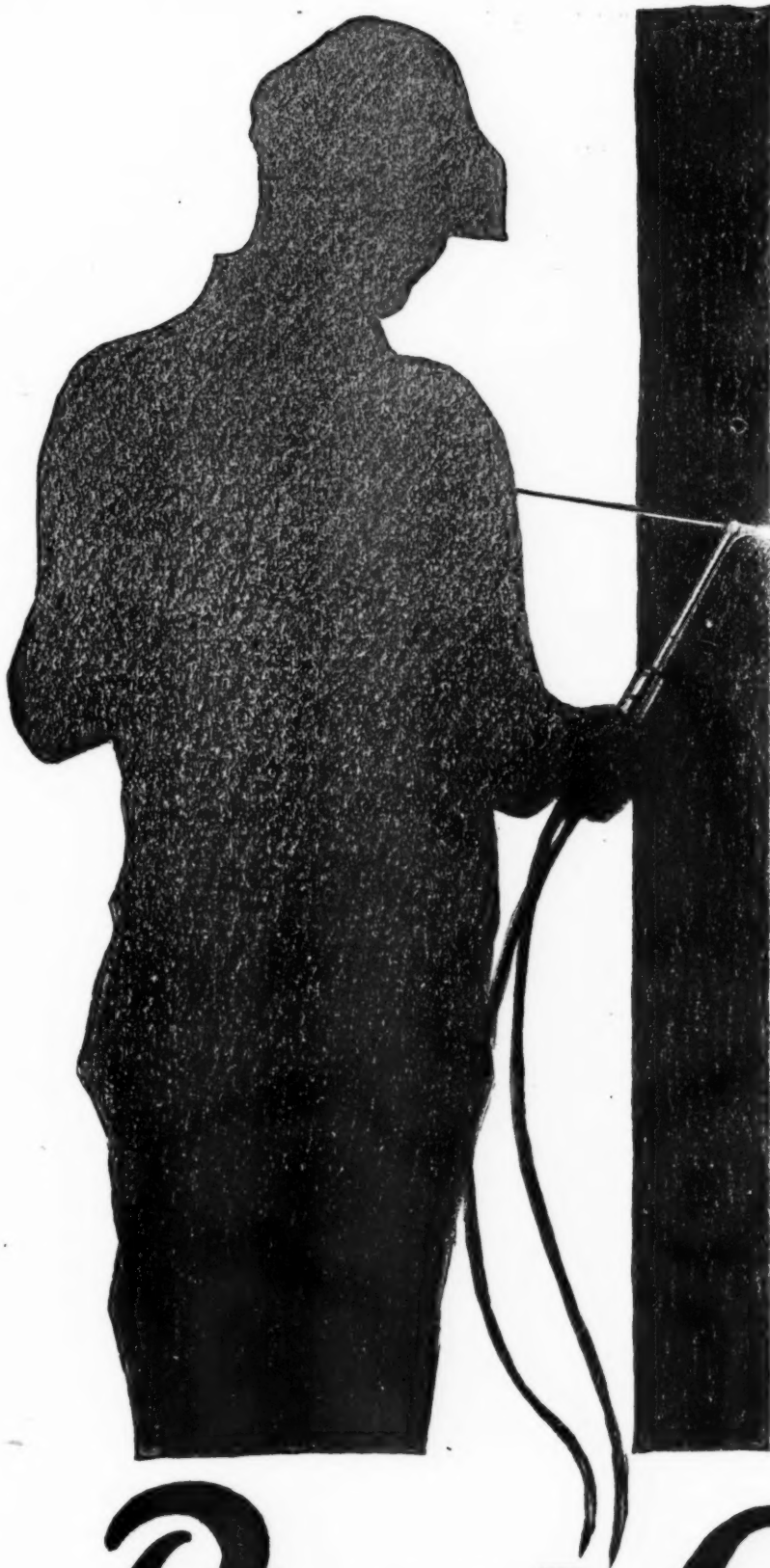
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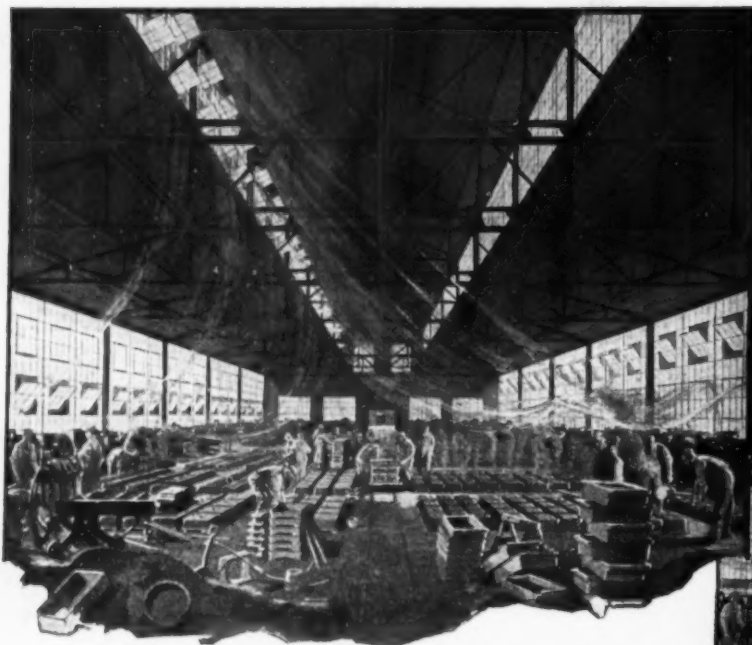
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Sidewall windows open on both sides.
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Sidewall windows closed. Monitor windows open on windward side.

How do open windows affect ventilation?

What is the measure of the air which will flow in and out of a building due to the buoyancy of the warmer inside air?

How do size and location of window openings affect possible air changes?

Is the direction of the prevailing wind a factor in natural ventilation?

Under what conditions is the effective flow of air in and out of a building assisted by the motive force of the wind? When is it hindered?

When you are making plans for new buildings—in advance of construction—these questions and many others deserve your serious consideration.

As a result of many experiments with models and tests in actual industrial buildings, our Department of Engineering Research has developed methods by means of which just such questions can be answered with considerable accuracy. By filling out the blank below you can have the benefit of this research work—without obligation.

Ask *Fenestra*

DETROIT STEEL PRODUCTS COMPANY • 2220 East Grand Boulevard • DETROIT, MICH.

What can you tell me about the different methods of ventilating the building described below?

Type of building contemplated: Single Story Multi-story

To be used for Length Width Height

Note: If possible, send tentative plans, elevations, sections or sketches showing size and location of all proposed windows with sill heights, together with any additional information which would have a bearing upon the design of the structure to be erected.

Name of Company Your Name

Address City State

